

JAN 17 '45

LIBRARY OF THE UNIVERSITY
OF ALBERTA

Manitoba Medical Review



STACKS

Vol. 25

JANUARY, 1945

No. 1

The Diagnosis and Treatment of Epilepsy,
Lieut.-Col. D. S. McEachern, R.C.A.M.C. 9

Case Report:

Septic Abortion and Lung Abscess
Treated with Penicillin,
Dr. A. T. Gowron 14

Obituaries 15

Clinical Luncheon Reports 16

Fracture Dislocation of the Cervical
Spine.

Fracture of Neck of Femur.

A Case of Subdural Haematoma.

A Preliminary Survey of Cases of
Epilepsy in the Winnipeg General
Hospital.

Hyperhidrosis of the Extremities.

Appendicitis: Summary of 75 Cases.

Cholecystography With a New Contrast
Medium (Preliminary Report).

Lead Poisoning.

Winnipeg Medical Society: Notice Board 19

Editorial 23

Manitoba Medical Service 24

Medical Events for January 25

Personal Notes and Social News 27

Department of Health and Public Welfare:

Comparison of Communicable Diseases 29

Mortality Statistics 29

Penicillin Therapy in Gonorrhoea and
Syphilis 31

Copyright: Under the Copyright Act of 1921

In Calglucol D, E.B.S. the presence of Vitamin D assures that the body will be able to fully metabolize all the calcium made available from both the Calglucol and dietary sources.

CALGLUCOL D, E.B.S.

***Administered orally
or intravenously . . .***

Lowered blood calcium is associated with many diverse ailments: blood coagulation, tetany, nephritis with uremia, obstructive jaundice, rickets in children and bone deterioration during pregnancy and lactation.

Calglucol D, E.B.S. is a useful medium for the administration of extra calcium whenever the need arises. Taken by mouth, it helps to relax bronchial spasm and, by decreasing capillary permeability, it diminishes the secretions of the mucosa of the respiratory tract.

In Calglucol D, E.B.S. the presence of Vitamin D assures that the body will be able to fully metabolize all the calcium made available from both the Calglucol and dietary sources.

Intravenous injections of Calglucol are a means of achieving a rapid increase in serum calcium. Such injections promptly relieve pain in inoperable malignant disease and in lead, ureteral or biliary colic. Eclampsia frequently yields to injections of Calglucol D, E.B.S.



Tablets or Ampoules

C. T. No. 149A—Calglucol D, E.B.S. for oral use is available in the form of tablets, each containing 10 grains of calcium gluconate and 500 International units of Vitamin D, in bottles of 100, 500 and 1,000.

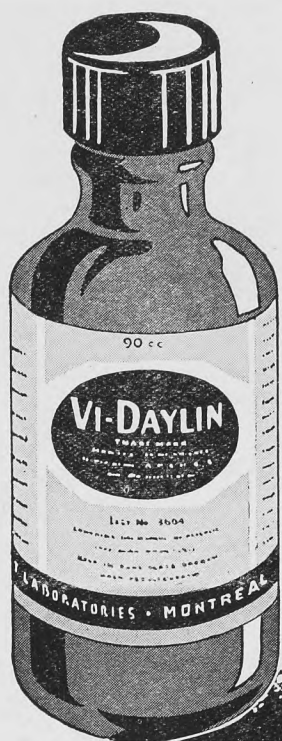
For injection purposes use Calglucol A-31, E.B.S., which is a 10% solution of calcium gluconate, supplied in boxes of 6 ampoules of 10 cc. each.

Indicate your preference for E.B.S. preparations when prescribing, by adding the letters "E.B.S.".

The symbol "E.B.S." denotes full potency; correct standardization; accurate compounding from materials of highest quality. All "E.B.S." preparations are compounded under strict laboratory control and are available by prescription from pharmacists throughout Canada.



TORONTO ONTARIO
Established 1879



Vi-Daylin

6 VITAMINS IN A VERY PALATABLE FORM

HOMOGENIZED EMULSION OF VITAMINS A, D, B₁, B₂, C AND NICOTINAMIDE

One teaspoonful (5 c.c.) contains:

Vitamin A . . . 5000 Int'l units (from fish liver oils)	Riboflavin 1.5 mg. (Vitamin B ₂)
Vitamin D . . . 1000 Int'l. units (Vioosterol)	Ascorbic Acid 75 mg. (Vitamin C. 1500 Int'l. units)
Thiamine Hydrochloride 1.0 mg. (Vitamin B ₁ , 333 Int'l. units)	Nicotinamide 5 mg.

In a palatable emulsion.

Designed for prevention and treatment of deficiencies of contained vitamins and as a general multivitamin supplement for infants and children. May also be preferred by adults because of its pleasant flavor. Daily dose for infants: $\frac{1}{2}$ to 1 teaspoonful. *Available at all drug stores in 90-c.c. bottles.*

Abbott offers
2 new VITAMIN PRODUCTS

Cecon

ONLY STABLE ORAL SOLUTION OF VITAMIN C

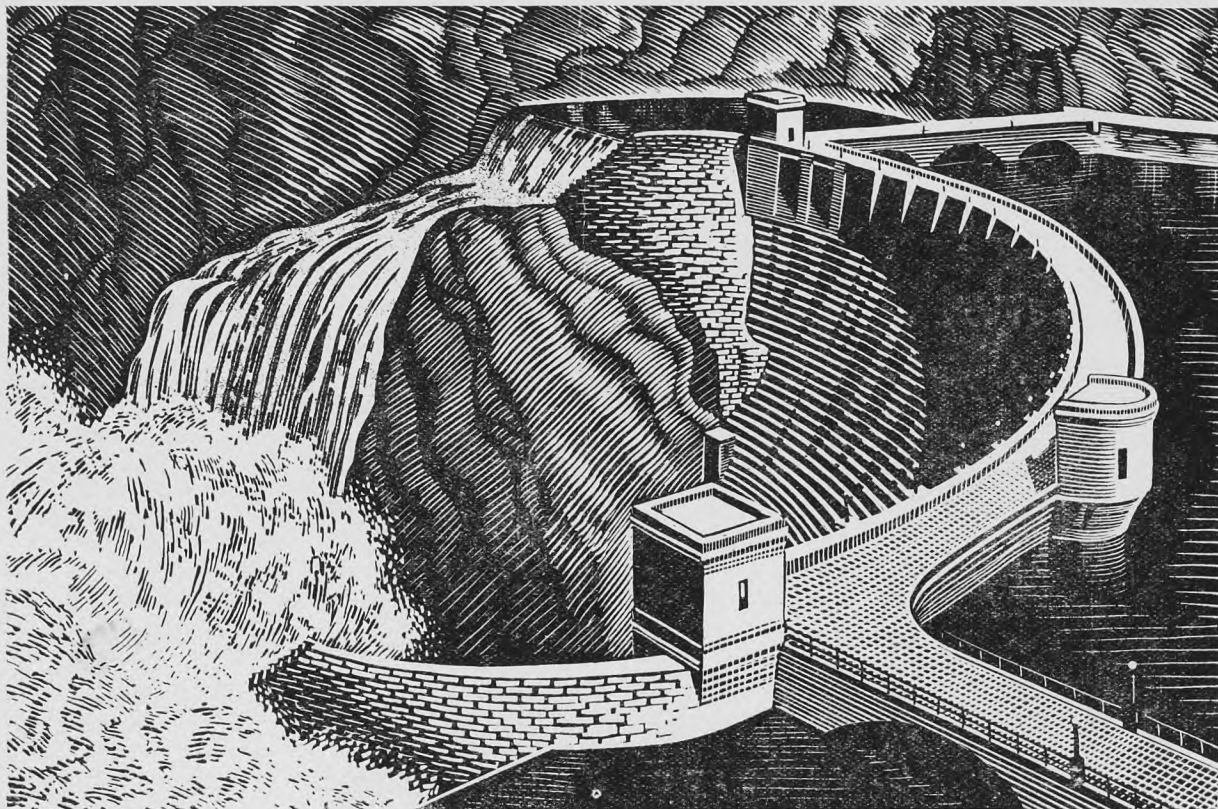
SOLUTION OF ASCORBIC ACID 10% w/v IN PROPYLENE GLYCOL

Each c.c. (approx. 40 drops from accompanying dropper) contains:

Ascorbic Acid (Vitamin C) 100 mg.

For prophylaxis and treatment of all vitamin C deficiencies. Adaptable for administration to infants and children since proper dose may be very easily added to the milk formula, water or any other liquid food. Daily requirement for infants, 4 drops; children, 1-12 years, 8 drops; adults, 12 drops. *Supplied in 10-cc. and 50-cc. bottles with dropper.*





"RELIEVE BACK PRESSURE"

When the back-water of the dam gets too high, the sluice-gate is opened and the lake level is dropped to a safe stage.

The arrhythmic heart is prone to produce a potentially dangerous venous congestion. DIGIFOLINE, by slowing down the rate, eliminating weak, ineffectual contractions, which take place before the ventricles have filled, causes a marked increase in the minute volume output of the heart, thus relieving this "back pressure."

DIGIFOLINE * can be administered orally, intravenously, intramuscularly or rectally in congestive failure, auricular fibrillation and certain other myocardial states. One tablet, one c.c. of liquid or one c.c. of ampoule content represents 0.1 Gm. (1½ grains) of digitalis leaf (Focke method).

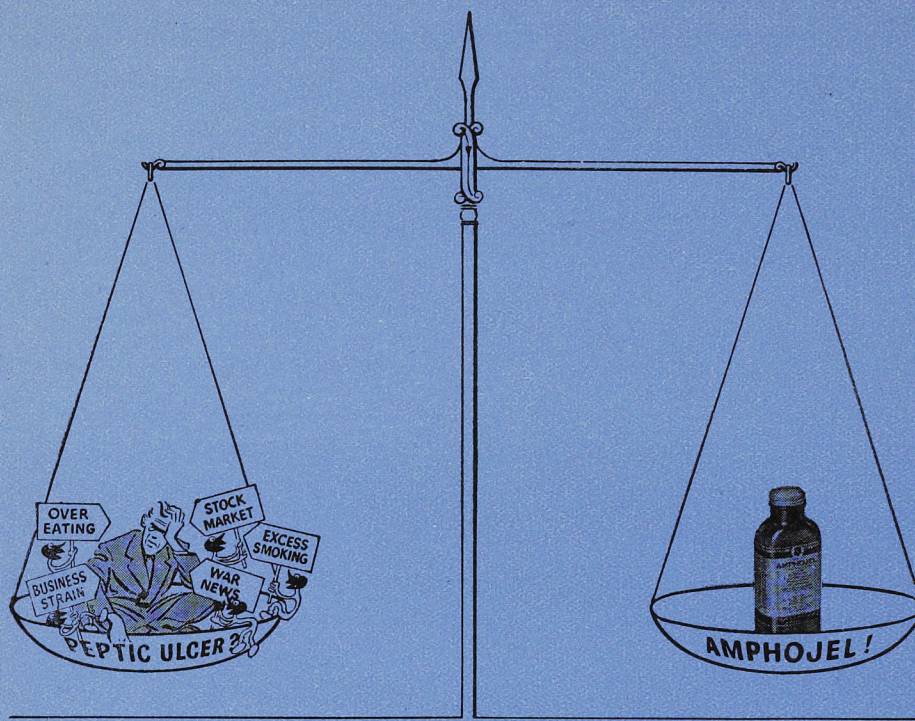
*Trade Mark Reg'd.



C I B A

Company Ltd.

MONTREAL, CANADA

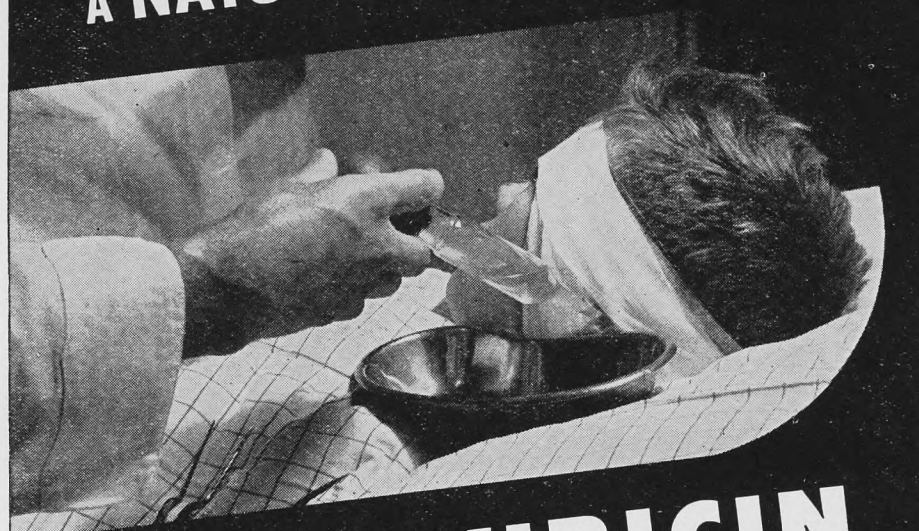


Today's accelerated tempo of living may become a serious threat to normal digestive function. To cope with rising incidence of peptic ulcer well known Gastroenterologists urge early diagnosis of peptic ulcer and prompt treatment to avoid serious complications.

AMPHOJEL

JOHN WYETH AND BROTHER (CANADA) LIMITED, Walkerville

A NATURAL ANTIBACTERIAL AGENT



TYROTHRIN
PARKE-DAVIS

OBTAINED from the aerobic spore bearing soil bacterium, *Bacillus brevis*, PARKE-DAVIS TYROTHRIN is effective against certain gram-positive organisms including pneumococci, staphylococci, streptococci, diphtheria bacilli, and others.

Use by local application: wet pack, instillation, or irrigation, in treatment of abscesses . . .

infected wounds . . . indolent ulcers . . . chronic ear infections . . . empyema . . . infections of nasal sinus . . . and following mastoidectomy.

TYROTHRIN, Parke-Davis, is supplied in 10 cc. vials, as a 2 per cent solution, to be diluted with sterile distilled water before use. It is for topical use only—not to be injected.

Parke, Davis & Company
WALKERVILLE, ONTARIO

BUY WAR BONDS AND SAVINGS STAMPS

EFFECTIVE RELIEF FROM SORENESS AND PAIN IN

"SORE THROAT"
ACUTE AND CHRONIC TONSILLITIS
PHARYNGITIS
AFTER TONSILLECTOMIES

Aspergum

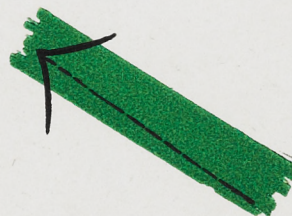
● In chewing Aspergum, the patient releases a soothing flow of saliva laden with acetylsalicylic acid—bringing the analgesic into *prolonged* contact with pharyngeal areas which often are not reached, even intermittently, by gargling or irrigations.

The gentle stimulation of muscular activity greatly helps relieve local spasticity and stiffness, increasing patient comfort, permitting an earlier ingestion of nourishing food, hastening convalescence.

Aspergum is pleasantly flavored—

it is readily accepted by all, including children and adults of finicky taste.

Ethically promoted—not advertised to the laity. In boxes of 16 and moisture-proof bottles of 250 tablets. Write for samples and literature to W. Lloyd Wood, Ltd., 64-66 Gerrard Street, East, Toronto, Ont.



Dillard's Aspergum



Allenburys

I-SO-GEL

A MUCILAGINOUS LAXATIVE WITH
A NATURAL MECHANICAL ACTION
A PRODUCT OF MUCILAGINOUS TROPICAL SEEDS



Stimulates Peristalsis

Does not gripe

Is not absorbed

Contains no sugar

THE ALLEN & HANBURY'S CO. LTD.

LINDSAY, ONTARIO • • LONDON, ENGLAND



A Clear Passage

Patients experience immediate relief as engorged nasal passages are speedily and thoroughly decongested by this powerful vasoconstrictor. Neo-Synephrine combines prolonged action with equal effectiveness upon repeated administration. It is virtually free from side reactions upon the heart and central nervous system, and does not appreciably inhibit ciliary activity.

Neo-Synephrine

HYDROCHLORIDE

LAevo • α • HYDROXY • β • METHYLAMINO • 3 • HYDROXY • ETHYLBENZENE HYDROCHLORIDE



Available in a ¼% or 1% solution in 1-oz. bottles for dropper or spray; ¼% Emulsion in 1-oz. bottles; and as a ½% jelly in collapsible tube with applicator.

Neo-Synephrine Trade Mark Registered

Frederick **Stearns** & Company

OF CANADA, LIMITED

WINDSOR, ONTARIO

NEW YORK

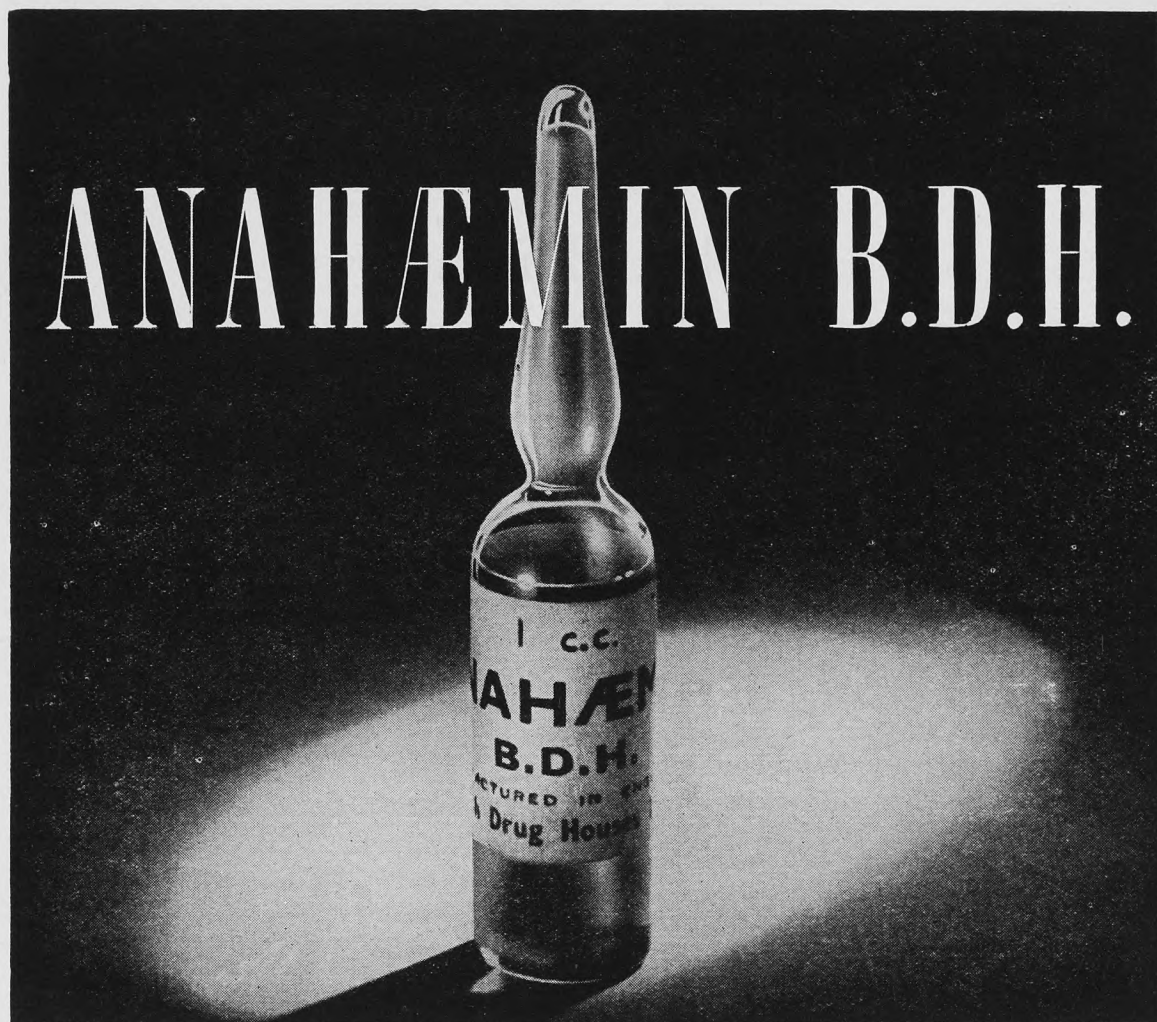
KANSAS CITY

SAN FRANCISCO

DETROIT

SYDNEY, AUSTRALIA

AUCKLAND, NEW ZEALAND



ANAHÆMIN B.D.H.

The hæmopoietic principle of liver issued in highly active solution

Specifically indicated in pernicious anæmia and other macrocytic anæmias and in subacute combined degeneration of the cord

Effective in small doses at wide intervals between injections

Economical in use

Anahæmin B.D.H. is available in ampoules of 1 c.c. and 2 c.c.

*Stocks of Anahæmin B.D.H. are held by leading druggists throughout the Dominion,
and full particulars are obtainable from*

THE BRITISH DRUG HOUSES (CANADA) LTD.
Toronto Canada

The Diagnosis and Treatment of Epilepsy

By Lieut.-Col. D. S. McEachern, R.C.A.M.C.

Consultant in Medical Research and Development, National Defence Headquarters, Ottawa, Canada
Assistant Professor of Neurology, McGill University, Montreal

There are probably 600,000 people in your country and mine who suffer from epilepsy. It is as common as tuberculosis or diabetes. It may be even more disabling since these people and their relatives live in fear of seizures which may occupy but a few minutes out of years of promising life. It has been estimated that the direct annual cost of epilepsy must exceed \$100,000,000, but no one can estimate the cost in terms of grief and despair.

Epilepsy is a symptom and is due to periodic and explosive discharge of nerve cells in the brain. Each one of us is a possible candidate for an epileptic seizure. Temporary arrest of blood supply to the brain, hypoglycaemia, an electric shock, or other factors might induce a seizure in any normal person. In a sense the epileptic seizure is the brain's normal response to abnormal circumstances. The trouble is that in many cases we do not know what the abnormal circumstances are.

In the end such neuronal explosions must be due to metabolic or physico-chemical changes in nerve cells which render them unstable and permit them to fire off either spontaneously or when disturbed by a scar, a tumour, or other abnormality of the brain.

Why seizures due to hypoglycaemia, brain tumour or other cause should be more reputable than those of unknown origin is hard to understand. But it is so, and can be laid to our own muddled ideas about heredity, mental deterioration, and personality changes in epilepsy. We are still left with the wastebasket term "idiopathic" epilepsy into which we throw cases of unknown causation. Our main clinical problems are: (1) To recognize and treat those cases in which seizures are due to disease of the brain, or to abnormalities of the circulation, or of the chemical processes of the body; (2) To treat symptomatically the cases which in our ignorance we label "idiopathic" epilepsy.

Investigation of a Case of Epilepsy

Many of the steps taken to discover organic causes of seizures are well known. I shall review them briefly, emphasizing certain new and valuable methods. The search must be patient and systematic to be successful.

The age of onset and type of seizure are of fundamental importance. Omitting the convulsions which occur so frequently in childhood, associated with any fever, we may say that epilepsy starting within the first two decades usually is in that vague group called "idiopathic". Starting within the next two decades it is usually associated with brain tumour. Thereafter renal and cerebral vascular causes become increasingly frequent, but the possibility of brain tumour should always be kept in mind. A history of prolonged or difficult birth and retarded development may indicate cerebral birth trauma. Head injury, even if remote, should suggest meningocerebral scar as a cause of seizures.

Every physician, nurse and relative should be taught to describe accurately the patient's aura and the pattern of attacks. The common patterns of focal attacks are illustrated in any textbook. A complete record of number and dates of seizures must be kept by the patient, since this is the only true guide to the success of therapy. It is essential to observe the very beginning of an attack, for it may rapidly spread from a focal to a generalized convulsion without localizing pattern. Rapid examination immediately after an attack may reveal temporary changes in the reflexes or sensibility which point to a focal defect and which cannot be elicited in the interim.

It is occasionally necessary to induce an attack in order that the pattern can be observed. This can sometimes be accomplished by having the patient hyperventilate strongly until an attack occurs or until carpopedal spasm appears. Hydration of the patient is even more effective. Water is given in large quantities along with repeated

*Address presented at the 29th Annual Assembly of the Inter-State Postgraduate Medical Association at Chicago, Illinois, U.S.A., Oct. 17-20, incl., 1944.

injections of pitressin. This is a hospital procedure.

Appropriate chemical studies are based on the circumstances under which attacks occur. Spontaneous hypoglycaemia may be suspected if attacks occur during fasting and are preceded by vagueness, anxiety and sweating. There may be a curious dreamy state with purposeless behaviour both before and for a long time after a seizure. Attempts should be made to produce attacks by fasting, to relieve them by administration of glucose, and to obtain chemical proof by blood sugar determinations made during attacks. Glucose tolerance curves should be carried at least to five hours in order to determine the low point which follows the early rise of blood sugar. A word of caution—sugar curves are tricky things to interpret.

I recall two elderly patients in whom epileptic seizures occurred only during the development of recurrent tetany. One suffered from osteomalacia and the other from mild parathyroid deficiency resulting from a thyroid operation. Attacks associated with uraemia, cerebral syphilis, vascular hypertension, and cerebral arteriosclerosis are usually recognized by careful routine examination. Even in these instances special studies may be necessary, since there is no guarantee that cerebral tumour and arteriosclerosis or syphilis do not coexist. We have seen the conjunction on several occasions.

Mention should be made of seizures in people with hypersensitivity of the carotid sinus reflex mechanism. As a result of sudden turning of the neck, an unusual position of the head, or the pressure of a high stiff collar, such patients suffer from a reflex fall of blood pressure or cardiac arrest, or both. Syncope results, and if the cerebral circulation is interrupted for more than about 12 seconds a convulsion may ensue. One of my patients, a middle-aged man, complained of seizures since childhood. Attacks first came when he knelt to pray in church on Sundays. This was the only day of the week when he was dressed in an Eton suit with high stiff collar. Attacks ceased when the minister advised that he stay away from church, since the prayers obviously did him no good. Attacks recurred later when he sat in the barber's chair and his head was thrust forward while the nape of the neck was clipped. It was easy to reproduce the attacks by pressure over either carotid sinus.

Carotid sinus syncope should be suspected

in any elderly patient who complains of brief spells of fainting, dizziness or "blackout." It can be tested by massaging one carotid sinus at a time with the thumb placed behind the angle of the jaw. The patient should be in the upright position.

Explanation of the mechanism may suffice to keep these people out of trouble. Atropine or ephedrine is occasionally helpful. If necessary the sinus can be denervated surgically. Attacks of similar character occur with Stokes-Adams syndrome in heart block.

Roentgenography

Good stereoscopic X-ray films of the skull should never be omitted. They may show quite unsuspected bony changes or asymmetry of the skull. There may be calcium deposits indicative of tumour, shift of the shadow of the pineal gland due to an atrophic or expanding lesion in one hemisphere, or even evidence of increased intracranial pressure.

Pneumography

X-ray visualization of the ventricles following injection of air or oxygen into the subarachnoid space has proved an invaluable procedure. When there is no contraindication encephalography is done, the gas being injected by the lumbar route after removal of spinal fluid. A case in point is that of a girl of 8 who had been presumed to suffer from idiopathic epilepsy for four years. X-rays of the skull showed marked disproportion between the two sides of the cranial cavity, and the encephalogram revealed lack of filling of the right temporal horn and displacement of the ventricles to the left. At operation a large cystic collection of cerebrospinal fluid was found in the right temporal lobe due to a membrane which separated the temporal horn from the rest of the ventricular system. This thin veil of tissue, presumably a congenital defect, spelled the difference between normal health and epilepsy for this patient.

A more recent case is that of a man of 46 whose only complaints were two generalized convulsions commencing several months previously. Clinical examination was negative. The encephalogram showed the right lateral ventricle to be depressed downward and displaced to the left. This was due to a large meningeal tumour which was removed completely.

Cerebral Arteriography

The visualization of the cerebral arteries following injection of a radio-opaque substance, such as thorotrast, into the carotid artery in the neck is of limited usefulness. When an aneurysm or vascular tumour is present, however, it may be the best or the only way to visualize the lesion.

Electroencephalography is a newcomer in the field, but has already established itself. During its few years of rapid growth this ingenious method of recording the so-called "brain waves" has become a reliable clinical tool.

The principle is that the rhythmic changes of potential of the normal brain can be led off from the surface of the intact scalp, stepped up about one million times by radio amplifiers, and recorded by means of ink writers on a moving strip of paper. Small silver electrodes are fixed to the scalp with collodion in a number of standard locations on each side of the head. The electrical activity of one side of the brain may be compared with that of the other side, or one small area with another.

Normally, two main rhythms can be recorded from the adult brain. Alpha (Berger) waves appear from the occipital regions at a frequency of about 10 per second, and beta waves at about 22 per second from the frontal regions. In epilepsy the normal rhythms are greatly disrupted, not only during a seizure but nearly always during intervals when the patient seems entirely well.

The following are some applications of this method to our knowledge of epilepsy.

The **diagnosis** of an epileptic attack is easy when a seizure is observed or has been accurately described. When, however, there is but a vague history of fainting spells, of waking in the morning with a bitten tongue, or of momentary absences, the diagnosis of epilepsy is a precarious one. The electroencephalogram may assist by showing either typical epileptic abnormality or a normal rhythm. Further, temper outbursts and fleeting personality changes in an epileptic patient can sometimes be correlated with a surge of subclinical electrical abnormality in the brain, although there may be no outward sign of a convulsive seizure.

There is also some indication from the record of the type of epileptic activity. It is possible that with further experience we

will classify seizures according to the underlying electrical abnormality, just as the terminology of the cardiac arrhythmias was altered by MacKenzie's study of pulse tracings and Lewis' analysis of the electrocardiogram.

Occasionally, differentiation between hysterical and epileptic seizures may be aided. Records taken during an hysterical seizure show a normal cerebral rhythm. Epileptics always show seizure waves during an attack.

Localization of epileptic foci is another important function of electroencephalography and may lead to successful surgical removal of the focus.

Finally, the method may be of value in **the control of medicinal therapy**. If a patient has a seizure only once in months it may take painfully long to determine whether his medication is adequate. He may, however, show almost continual abnormal activity in the electroencephalogram which becomes reduced or disappears with adequate therapy. Unfortunately, there is no rule to this and some patients may remain free of attacks with little or no improvement in the electroencephalogram.

Let us guard against the exploitation of this valuable method. The technique is difficult to master and interpretation of the records requires experience and good judgment. Remember the early days of electrocardiography when machines were multiplying by the hundred and self-styled heart specialists sprang up overnight. It will not be long until fairly simple apparatus is available for recording the E.E.G. Let us use it with caution and common-sense and not as gadgeteers.

We have reviewed the steps sometimes necessary to uncover the causes of epileptic seizures, but there remain many cases for which no cause can be found. Let us therefore discuss the treatment of these cases.

Treatment

Drug Therapy—We will consider here only three drugs of proved usefulness, the bromides, phenobarbital and dilantin. They are powerful tools and it is worth remembering some principles which govern their use. **First**, some patients are not helped by medicines. If seizures are not reduced or the patient benefitted, it is wasteful and may be harmful to continue with the drug. **Second**, there is no standard dose that suits

all patients. The dose should be increased until seizures are controlled unless toxic symptoms prevent this. **Third**, not all types of seizures are helped equally by a given medicine. It is criminal to permit a patient to go on for months or years with uncontrolled seizures and try no change of medication. **Fourth**, our aim is not only to stop seizures, but improve the total condition of the patient. A regime which stops seizures but turns the patient into a vegetable has little to recommend it. With these points in mind, let us now take inventory of our tools.

The bromides are used much less now than formerly. They are often not as effective as the other drugs. They frequently cause unpleasant acne, depress and slow down the patient's mental activity, and occasionally pile up in the system to cause a real toxic psychosis. The latter picture is not as well known as it should be. The patient develops inco-ordination, a staggering gait, and thick speech. This may advance to frank delirium with hyperactivity, hallucinations, and even coma. One of our patients who was treating himself with a mail order epilepsy nostrum was committed to a mental institution before the condition was recognized. The psychosis is related to the concentration of bromide in the blood and tissues, and the well known bromide skin eruption is usually absent. The condition can go unrecognized for months. The blood bromide is almost invariably above 150 mg. per cent. Treatment consists in replacing the bromides by some other drug, and by giving 12 to 15 gms. of sodium chloride per day. The chloride replaces the bromide ion and the psychosis clears quite rapidly. Despite these disadvantages there are some cases of epilepsy in which the bromides give better control of seizures than any of the other drugs.

Phenobarbital is probably a more effective drug and certainly causes fewer toxic manifestations. Moderate doses may not cause dullness, but larger doses may be necessary to control seizures and unfortunate slowing of cerebation results. A good tip is that the addition of small doses of benzedrine or of caffeine may abolish the mental dullness without altering the anti-convulsive effect of the phenobarbital. A total of $1\frac{1}{2}$ to 2 grains of phenobarbital per day, divided into several doses, may suffice to control seizures, but we have sometimes been forced to raise the dose to 9 grains daily, before seizures were con-

trolled or the drug abandoned. Phenobarbital is also available in soluble form for use in prescriptions. This sodium salt contains 10 per cent less phenobarbital than the phenobarbital itself. Liquid preparations should not be kept for more than three weeks, since carbon dioxide tends to precipitate the acid form of the drug.

Phenobarbital soluble is valuable when given intravenously or subcutaneously in doses of 1 to 5 grains for the control of status epilepticus. In this emergency, however, we prefer to use avertin administered by rectum in $\frac{2}{3}$ the usual anaesthetic dose.

Dilantin, a new drug, has already proved its merit, and has practically remade the lives of some epileptic patients. It has high anti-convulsive power and has the great advantage of causing no hypnotic effects or mental dulling. Occasionally it has mild stimulating effects. I have seen patients who were apathetic, querulous, and inclined to temper outbursts transformed into pleasant, agreeable and brighter people when sedative drugs were replaced by dilantin.

In a large series of cases dilantin has proved more effective in stopping or lessening seizures than either phenobarbital or bromides. It is especially effective in controlling psychomotor seizures, which are little influenced by the bromides or phenobarbital. Like other drugs, dilantin is much less effective in controlling petit mal attacks. It may indeed aggravate them. In the end, persistent and conscientious trial is necessary to determine which drug is the best for the individual patient. I have one patient whose seizures have been completely abolished with dilantin, whereas a cousin's attacks were made worse with it but are well controlled with phenobarbital.

Dilantin is analogous to the barbiturates, but is a derivative of glycolyl urea instead of malonyl urea. It is only soluble in alkaline solution and therefore cannot be given intravenously. The drug is available in capsules containing $1\frac{1}{2}$ grains for adults and $\frac{1}{2}$ grain for children. The usual dosage for adults is $1\frac{1}{2}$ grains three or four times daily, although we have exceeded that amount on occasion. The drug should be taken during the course of a meal or with milk before retiring to avoid any tendency to gastric distress. The dosage is proportionately less for children, and the powder may be mixed with cream if they are unable to swallow capsules.

If adequate doses of dilantin fail to control attacks the addition of small doses of phenobarbital sometimes meets with success. The most suitable combination is a matter for clinical trial.

Mild toxic phenomena are quite common with dilantin. After a few days of full dosage there may appear nystagmus, diplopia or difficulty in focusing the eyes. There may be dizziness, inco-ordination of the limbs, and staggering gait. These symptoms usually pass off in a few days. If not, it may be necessary to reduce the dose for a week. Resumption of the full dose may then not lead to a return of toxic symptoms. Only rarely is it necessary to discontinue the drug.

Quite exceptionally a patient is sensitive to dilantin and reacts with sharp fever, sore throat, or a skin rash. The latter is a red, macular eruption involving the trunk and limbs and may be intensely itchy. It may appear within a day or so of commencement of the drug or after as long as three weeks.

A much commoner but not very troublesome complication is a curious hyperplasia of the gums, occasionally with soreness and some bleeding. With good oral hygiene the condition has not forced us to discontinue the drug in any case.

A very helpful point is to have the patient massage the gums with the forefinger for five minutes twice daily.

Toxic side effects are less apt to appear if the dosage of the drug is worked up gradually over the course of several weeks. If one wishes to change a patient over from phenobarbital to dilantin, the replacement should be made gradually.

A satisfactory method is as follows: If a patient is receiving phenobarbital three times daily, only one of these doses should be replaced by a dose of dilantin to begin with. After three days further replacement of one dose can be made, and so on every three days until the patient is receiving dilantin alone three or four times daily. This method reduces the danger of releasing seizures through sudden withdrawal of phenobarbital.

The use of dilantin requires careful supervision by a physician and intelligent manipulation of dosage. It will then be found to work like a miracle for some patients, to benefit quite a number of others, and in a few instances to be useless.

Success with any of these drugs requires painstaking trial and adjustment of dosage. Too often the physician looks upon the situ-

ation with gloomy pessimism, writes a prescription for some drug and washes his hands of the matter. There can be no excuse for the doctor who permits a patient to go on indefinitely having uncontrolled seizures without complete study of the case or change of regime. It is important also to individualize treatment. Some patients have their attacks only at night. They should receive a larger proportion of their medication before retiring. Some women have attacks only at the time of the menstrual period, and should obviously be given greater protection at that time.

The doctor seldom witnesses a seizure save by accident. His chief concern is to save the patient from injury and embarrassment. May I offer three DON'TS:

1. **Don't** thrust a stick between the teeth. A bitten tongue will heal, but not a broken tooth (a folded handkerchief may be placed between the teeth if possible).
2. During the brief period of purposeless behaviour before recovery, go along with the patient and **don't** restrain him unless necessary.
3. Finally, **don't** order an ambulance and admit him to hospital until you find out whether he wants you to. He may have just come out of hospital.

The above discussion has dealt with but a few of the many questions that arise in the care of the epileptic patient. Others include the use of ketogenic diets in children; the question of rest and exercise and proper elimination; the avoidance of dangerous occupations; the problem of marriage, of bolstering the patient's morale, of tempering the family's shame and humiliation, of advising upon inheritance of a condition which may be many different conditions aping one another.

Idiopathic epilepsy should be a hopeful condition. It can be diagnosed early before there is a mental deterioration, and we find no structural impairment of the brain as in many other diseases. Education and understanding will remove the stigma from it as from cancer and tuberculosis.

Above all, there is a need of funds and support. Funds to carry out large scale trials of new drugs. Funds to support eager young men whose training fits them to delve into the mechanism of seizures. Funds to provide them with the equipment they need. For this much is certain, be it a long time or be it short, investigation and research will some day reveal the mechanism that permits such seizures to occur.

Case Reports

Septic Abortion and Lung Abscess Treated with Penicillin

Dr. A. T. Gowron

Mrs. K., a woman of 30 and mother of five children, was seen at her home on October 29th. She said that she had been ill for two weeks with chills, fever and general malaise. About mid-October she came to the conclusion that she was about two months pregnant and went to a woman to be aborted. About two days later she had a chill followed by fever, symptoms which persisted. A week later, no abortion having happened in the interval, she again saw the "woman" and the operation was repeated. Following this her symptoms increased but she did not abort. She was so ill that she called a doctor, who prescribed "pills" (sulpha?), which she took for four or five days with no benefit. About October 27th she began to have sharp pains in her chest, accompanied by cough.

She was a fairly well-nourished but very sick-looking woman, with flushed face and anxious expression. Her temperature was 102 and respirations were 28. The head and neck were negative. Careful examination of the chest showed the left side to be normal, but there were slight, indefinite signs upon the right side. The heart was negative, blood pressure 118/70, pulse 120. The abdomen was distended but soft. There was moderate tenderness over the pelvic region but no masses or enlarged viscera were palpated. Diagnosis was made of septic abortion with septicaemia and possible lung abscess. She was admitted to St. Boniface Hospital.

After admission the following laboratory tests were done: Urine, 1022; albumen, a trace, with pus; granular casts and red blood cells in the sediment. Blood, 11,550 white cells with 78% polymorphs. The sedimentation index was +51.

Treatment: The head of her bed was elevated, fluids were forced, continuous heat (fomentations and radiant heat) was applied, sulpha-thiazole was given in 15 grain doses every four hours.

Progress: During the next three or four days she changed very little. The distention increased somewhat, the pains persisted, the temperature ranged between 101 and 105 and she had chills nearly every day. Blood cultures were taken on the 30th and 31st (both were reported negative seven days later). Her red blood cells were 3,000,000 and the haemoglobin 52%. The sedimentation index

rose to +82 (October 31). As she had been on sulpha thiazole for three days certainly and probably for eight days it was felt that nothing was to be gained by continuing with it. Instead penicillin was given by continuous intravenous drip, 200,000 units being administered in 24 hours.

The day after penicillin was started the temperature fell and the distention diminished, but a day later she had another chill and the coughing had increased. Penicillin was being given intramuscularly every three hours. An X-ray of the lung was taken on November 2nd and reported thus: "Left diaphragm is normal. Left lung is clear. Heart and great vessel shadows appear normal. Right diaphragm is elevated. Infiltrative changes are seen in the right costo-phrenic angle and in the right central lung field. There is also a suggestion of beginning cavitation in the central lung field. The appearance indicates a septic process with a probable lung abscess."

Five days after penicillin was started she expressed herself as feeling very well. The temperature swung between 103 and 105 and the cough and chest pain were still present. The penicillin was increased to 300,000 daily (November 4th). For the next ten days the temperature remained at 100-101, and on November 14th it was 99. Her appetite improved and the cough diminished. The abdominal distention was a little less and the pain was easier.

Because of the anaemia (3,000,000) she was given 500 cc. of citrated blood on November 6 and again on November 25. The white cell count rose from 11,300 (October 31) to 14,250 (November 14) to 17,900 (November 22). On the same dates the sedimentation index was +51, +109, +125. Meanwhile she expressed herself as feeling well and she looked better. The X-ray, which revealed a probable abscess on November 2, showed "The area of consolidation considered to be a cavity is still present" (November 15th).

From November 15th, when the dose was 300,000 units daily, the penicillin was gradually reduced to 100,000 units on the 20th, but as the temperature increased the dosage was raised to 200,000 units. The temperature, however, persisted. On November 22nd it was 101.2. At that time the leucocytes numbered 17,900, polymorphs 80%, red cells

3,330,000, sedimentation index +125. On November 25th she was given her second transfusion of 500 cc. of blood. On November 27th sulphadiazine (15 grains every four hours) was given, as well as 100,000 units of penicillin. The X-ray taken on that date showed there was still some infiltration in the base of the right lung, but this showed further improvement. No definite area of cavitation could be defined. On November 28th the sedimentation index had fallen to +37. From then on she had no fever. Penicillin was discontinued on the 29th and sulphadiazine on December 1st. Four days later the sedimentation index was +26, the erythrocytes 4,470,000, haemoglobin 80%. The X-ray showed "only scattered infiltration and areas of fibrosis but no sign of cavitation."

When she was discharged on December 7th the lungs were clear, temperature and pulse rate had been normal for 17 days and the abdomen was negative except for the palpable uterus. She was still pregnant.

A point of interest was the rapid improvement when sulphadiazine was added to the treatment. The organism to blame here was not identified, but it will be recalled that Spink of Minneapolis reported that of 68 strains of staphylococci 12% resisted penicillin and 28 resisted sulphathiazole. The results here of combining penicillin and sulphadiazine would suggest that organisms of both types were present. We come to the conclusion that when penicillin alone or sulphadiazine alone are only partially, or are not at all effective, the addition of the other is wiser than discontinuing the original drug completely.

Obituaries

Capt. John A. McFadden

Capt John A. McFadden, R.C.A.M.C., whose parents live at Dauphin, died on December 26th as a result of wounds received while on active duty in Italy. He had served overseas since July, 1944.

Born in Dauphin in 1918, Capt. McFadden graduated in medicine from the University of Manitoba in 1943, after internship at Vancouver General Hospital. He took his officer's training at Camp Borden, then was stationed at Victoria, B.C., Alberni, B.C. and Wainwright, Alta. He is survived by his widow, a son and daughter.

Dr. Robert E. Davis

Dr. Robert E. Davis died at his home in Deer Lodge, Manitoba, on December 10. Born at Ottawa in 1869, he graduated in medicine from McGill University in 1894 and after two years post-graduate work in St. Bartholomew's Hospital, London, he practised in Minnesota. In 1904 he removed to Winnipeg, practising there until 1927 when he retired on account of ill health. He is survived by his widow, a daughter and three sons.

Dr. William Casey Netterfield

Dr. William Casey Netterfield, 53, died December 23rd in Grace Hospital. He was born in Granton, North Dakota, was educated in Wesley College, Winnipeg, and graduated in medicine from the University of Manitoba in 1920. He was a medical missionary in China and on his return practised in St. James.

The Executive and Members of the Manitoba Medical Association wish to extend their sympathy to Dr. H. G. Grieve, whose mother Mrs. Margaret A. Grieve died December 19.

65% of all Industrial Claims are due to DERMATOSES



2 oz. Prescription Jar
Tarbonis Cream

For the Treatment
and Alleviation
of

ECZEMA
INFANTILE ECZEMA
SEBORRHEIC
and
ECZEMATOID
DERMATITIS

To the overburdened Medical Profession, the importance of an efficient, quick-acting agent for the treatment and prevention of occupational dermatitis is evidenced by U.S. Public Health reports, which indicate that approximately 65% of all industrial claims for compensation are due to dermatoses.

TARBONIS CREAM
is available at Drug Stores
on Prescriptions of the
Medical Profession

Literature Sent on Request

Distributed by

Fisher & Burpe
Limited

WINNIPEG - EDMONTON
VANCOUVER

Clinical Luncheon Reports

St. Boniface Hospital

Fracture Dislocation of the Cervical Spine Dr. Henry Funk

Dr. Henry Funk presented the end results of three cases which were treated for fracture dislocation of the cervical spine. He contrasted the old method of caliper traction on the skull with a newer method in which the patient is placed on his back and a padded projection off the head of the table is used as a leverage to apply extension, by a halter against the skull, just below the occipital protuberance. Under anaesthesia the dislocation is reduced and the patient is then put up in a plaster jacket of the thorax, neck and head in one piece. After a few months the plaster is removed.

The X-rays at the time of the dislocation and fracture were contrasted with those after the reduction and in all cases showed satisfactory replacement. The clinical results were very satisfactory.

Adams-Stokes Disease

Dr. A. Shubin presented a case of Adams-Stokes disease with electrocardiographic evidence before and after treatment. The clinical history was that of a woman of age 60 who took several spells of syncope and muscular twitchings through the day associated with a bradycardia of 28 to 30. Dr. Shubin presented the diagrams of cardiac conduction fibres and discussed the various degrees of heart block and the sites of the damage in the heart for each type. An amusing incident regarding the number of attacks this patient had was supplied by Dr. I. Pearlman. In reading the history it was said that the woman had 20 spells in the 24-hour period. Dr. Pearlman had seen this patient and he considered that as the woman had four daughters and that each one had observed five spells—then the total spells she had, numbered twenty.

As to treatment Dr. Shubin administered Barium Chloride gr. $1\frac{1}{2}$ t.i.d in order to cause irritation of the ventricular myocardium to cause its rate of concentration to exceed the critical level of 35 at and below which cerebral anoxia will bring out the nervous manifestations of the disease. Salyrgan and theophylline were also used for the congestive symptoms and Dr. Shubin warned against the use of salyrgan intravenously in cases of coronary sclerosis. He considered intramuscular injection safer.

St. Joseph's Hospital

Fracture of Neck of Femur Dr. Angus Murray

Dr. Angus Murray in presenting a case of fracture of the neck of the femur reviewed the evolution of treatment as he had observed and practiced it. He described the long splint, the pottery and weight, the operations of Whitman, Albee, Lovett and Coffin. He dealt at greater length on the technique of Smith and Peterson which had supplanted all other methods. He mentioned also some of the sequelae of the operation—death of the head of the femur, the development of osteoarthritis, the presence of pain and the occasional dislodgement of the nail. Dr. Murray also discussed the site of the fracture as it influenced method of treatment. Dr. W. F. Abbott cited a case of his own in a woman of 70 where impaction was sufficient to mend the break which had occurred in good position.

Victoria Hospital

Lead Poisoning — Dr. Harry Herschfield

A girl of 19 employed in a battery factory complained of having been in poor health for several months. She felt tired, had no appetite, was very costive and generally felt miserable. In appearance she was pale and close inspection of her mouth showed a blue line near the gum margin. Her occupation and her symptoms pointed to lead poisoning. An examination of her blood showed a moderate degree of anaemia with 78% hemoglobin and numerous stippled cells. She was given a high calcium diet with calcium lactate in addition and got well.

In discussion Dr. W. A. Cooper described the clinical course of a series of cases that had been under his care. Dr. Lederman remarked that basophilic stippling is merely a sign of cell immaturity and is not pathognomonic of plumbism. He mentioned, also, that poisoning by inhalation is much more serious than by swallowing because the inhaled lead is one hundred times more toxic.

Winnipeg General Hospital

A Case of Subdural Haematoma Dr. H. F. Cameron

November 16, 1944.
Subdural Haemorrhage—Acute and Chronic.
Acute—Usually due to severe brain injury.

Chronic—Infants—Hydrocephalus.

Adults—40 to 60 years of age.

The haemorrhage is usually due to rupture of a vein upon the cortex of the brain. In adults this haemorrhage may simulate a rapidly expanding lesion (brain tumour). In babies the haemorrhage is usually due to a birth injury. The clot is evacuated; any membrane connected with the clot is removed—gives more satisfactory results in later life.

Case: Mrs. L., aged 54.

Headache, dizziness, confusion. History of a mild injury on July 17, 1944, and a second on July 27, 1944. On this date she was found on the floor beside her bed in a stuporous condition, with swelling of face, bruising of soft tissue, etc., blood pressure of 128/70 and pulse of 50. Lumbar puncture showed pressure of 70 mms. of water; fluid was clear. Subdural haemorrhage was suspected, as the symptoms were typical. Urine was carefully examined. Blood urea estimations were normal. With the clinical symptoms any cerebral haemorrhage should have been on the right hemisphere.

On July 31st the patient had a craniotomy and haemorrhage was found on the opposite cerebral hemisphere to clinical signs. The blood clot was washed out. For two days the patient remained comatose and on August 2nd a lumbar puncture was done—no pressure at all. On August 7th the patient suddenly snapped out of stupor, with no paralysis.

Dr. Cameron wished to stress the following points in this case:

- (1) No pressure of cerebral spinal fluid.
- (2) Clot on the wrong side for clinical symptoms.
- (3) Prolonged period of unconsciousness following operation.

Those taking part in the discussion: Drs. Allison, Hunter, Rice and Pincock. Prof. Thomson pointed out that all muscles are anatomically connected by nerve supply from both cerebral hemispheres.

A Preliminary Survey of Cases of Epilepsy in the Winnipeg General Hospital

Presentation by Dr. Ethel Herriot.

Discussion by Drs. H. V. Rice, Harriet Perry and Brian Bird.

Resume of 33 cases of epilepsy from the Out Patient Department.

The average age of onset was 14; the average age they began treatment was 30.

7 had a positive family history for epilepsy.

9 cases had a history of trauma.

20 had an aura.

There were 4 cases of "petit mal," 13 "grand mal" and 16 combined.

1 positive Wassermann, and of 17 cerebrospinal fluid Wassermanns 1 was positive.

Of 9 air electro-encephalograms 4 were positive.

Of 17 electro-encephalograms 16 showed abnormal pattern.

Epileptic incidence of population is one-half of 1%. There are supposed to be half a million in the United States.

Of Dr. Penfield's operative cases, 80% showed improvement. Dr. Penfield recommends the relatives to keep a chart of the patient's seizures, whether daily or nocturnal seizures predominate.

Dr. Perry gave a resume of the barbiturates used in the treatment of epilepsy. She showed 3 colored slides of gingivitis produced by Dilantin. Dr. Perry mentioned the use of triple bromides and phenobarbital for the lower cerebral centres and bromides for cerebral excitement. She mentioned that in older people the liver and kidneys should be watched for cumulative action. It is on record where a patient complained of double vision with gingivitis who was taking Dilantin without careful supervision. A trip was made to the optometrist, where glasses were prescribed, and another journey to the dentist, where a number of teeth were extracted, when the patient required a reduction in the dose of Dilantin.

Dr. Bird has had good results with Dilantin. He is in favor of the plan that sometimes the drug should be given to mild toxicity to get its full effect. Epileptics should have a thorough physical check-up before prescribing the use of any drug. Dr. Bird believes that epileptics present a complex problem, that epileptics should work and both employers and relatives should exercise restraint and sympathy in dealing with them. It is unsatisfactory giving large doses of barbiturates if the epileptic has an employer who "rides" him at work, or similarly giving large doses of phenobarbital to overcome an unhappy domestic life.

Hyperhidrosis of the Extremities

Dr. O. S. Waugh

October 19, 1944.

Female, in her 20's, stenographer, has had profuse sweating of hands and feet since childhood. This condition was made worse by excitement or emotional upsets. Water would drip from the hands and feet; perspiration was more from the ankles rather than the soles in the lower extremities.

Dr. Waugh mentioned the work of White and Smithwick in surgery of the sympathetic. He also enlarged upon the vaso, pilo and pseudo motor nerve fibres to the skin.

Dr. Waugh cut the 2nd and 3rd intercostal nerves with the accompanying white and grey rami communicantes to the sympathetic; the sympathetic chain was sectioned below the 3rd ganglionic enlargement; the upper stump of the distal chain was ligated with silk, the lower stump of the upper chain was dissected free and buried in the extra thoracic muscles. These steps are adopted to try to prevent nerve regeneration. This gives a pre-ganglionic denervation of the upper limb.

Dr. Waugh gave a dramatic exhibition of the effect upon the right extremity after operation. Both hands were exposed and painted with an alcoholic solution of Cobalt blue. (This solution becomes pink in contact with water or sweat). Within 30 seconds the palm of the left hand was pink while the right hand remained blue. The left upper extremity will have a similar operation to the right later on. Dr. Waugh mentioned that there is a narrow band of anaesthesia across the axilla and upper chest on the side operated on, as a result of section of the 2nd and 3rd intercostal nerves. This is the only uncomfortable result that follows this operation, but the patient very quickly accommodates to this abnormal feeling.

On Friday, October 20th, under spinal anaesthesia, Dr. Waugh did a bilateral resection upon the lumbar 2nd and 4th to control the condition of the feet.

Dr. Hollenberg and Dr. H. Rice took part in the discussion.

Appendicitis: Summary of 75 Cases

(February to April, 1944)

Dr. W. J. Friesen and Dr. D. Nicholson

October 19, 1944.

This was a splendid analysis of 75 appendices by Dr. W. J. Friesen, former resident

in pathology at the Winnipeg General Hospital. Of the 75 cases, 19 were removed incidentally at the time of some other operation, which leaves 56. Of these 56, 14 were acute or subacute.

Dr. Nicholson went into detail regarding the technique of examining appendices at the pathological department. He mentioned the normal tissue found in appendices at autopsy in the different age groups; as the subject becomes older the lymphoid tissue of the appendix is replaced by scar tissue.

There was a spirited discussion following the presentation of this paper by Drs. Burrell, Gunn, N. J. Maclean, Markovits, Hunter and Strong, and Col. Fahrni. It was mentioned that with obstructive appendicitis one could have clinical symptoms without early pathological changes. Dr. Hunter thought that the 3 to 1 ratio of appendices showing non-inflammation showed that chronic pain in the right iliac fossa was difficult to diagnose. It would appear that the diagnosis of appendicitis is a most baffling condition.

Cholecystography With A New Contrast

Medium (Preliminary Report)

Dr. R. A. MacPherson

October 5, 1944.

In 1940 Dohern & Diedrick brought forward a drug with a long chemical name and first introduced in this country under the name of "Priodax". This chemical compound up to the present has proven more satisfactory than the tetraiodophenothalein, principally because of the lessened "side effects" on the gastro-intestinal system. We have used Priodax at the Winnipeg General Hospital in over 200 consecutive cases.

Conclusions

1. The use of the new drug for cholecystography has many advantages over the tetraiodophenothalein.
2. The incidence of nausea, vomiting and diarrhoea are greatly lessened and the severity of these effects diminished.
3. The diagnostic accuracy appears to be equally as good.

Those taking part in the discussion were Drs. Thorlakson, Burrell and MacCharles. The latter thought in certain cases of suspected gall bladder disease a barium series would reduce the incidence of error in diagnosis of gall bladder conditions.

Winnipeg Medical Society—Notice Board

P. H. McNulty, President
A. M. Goodwin, Vice-Pres.

Next Meeting Friday, January 19th

W. F. Tisdale, Secretary
E. S. James, Treasurer

I wish you all a Prosperous and Happy New Year. My own will be happier when I get rid of Janus. Ever since I began to think upon what I should write for this issue I have been haunted by Janus—the single-headed, double-faced Roman deity, the guardian of the gates of the year, after whom his month is named. There is no particular reason why he should get mention, but every time I took pen in hand this beastly bi-frontal monstrosity would lay his grotesque head upon the paper and defy me to proceed without him. The head of Janus bothered me as much as the head of Charles I annoyed Mr. Skimpole, so there was nothing for it but to lay the ghost.

Janus, in common with most of the ancient deities, had a disreputable origin. His mother, variously named Demeter, Persephone, Hecate, etc., was at times represented by a dog and was sometimes given three faces. She was a regular “come up and see me” girl, and definitely knew how to cook with gas on the front ring, for all of which reasons I have no doubt she was referred to by her closest lady friends as “that three-faced bitch,” which, after all, was only the truth. Janus used his two faces for looking backward and forward. Sometimes he was represented as having four faces, so that he could look out of all four doors of his temple at one time. This temple was erected by King Numa, that sly old rascal who spent most of his leisure with the good-looking nymph, Egeria, discussing, he claimed, religious and political matters. When the neighbors suggested that there might also be a slight soupçon of carnal concupiscence, Numa replied with dignity that the maiden had “honored him with her love,” which put everything on a nice high plane.

Janus did business in his temple only when a war was on, but that was most of the time. He shut up shop for only three periods in 700 years. Like most ancient deities Janus had a variety of names and when the Romans wanted his help in the matter of doors and things about the house, they prayed to him by his name Janitor and made offerings for his speedy attention, a procedure not unlike that of the modern apartment house dweller. And now, having disposed of Janus, keeper of the doors of the year, the original janitor,

and patron of the species, let us to more important things.

From what I can make out those who attended the December meeting got quite a few useful pointers on fractures and other ailments. They tell me that Dr. Birt gave so graphic a description of Scabies that most of his audience were scratching themselves by the time he finished. I understand that every dermatologist lives for the time when the thought of scratching makes one think of his name, and the mention of his name makes one scratch.

For January we have a thyroid programme. The Medical Treatment of Goitre is Dr. Margolese's subject with all the latest on thiouracil. Dr. Kitchen will deal with Hypothyroidism marked and overt. Drs. A. C. Abbott and A. R. Macpherson will discuss X-ray treatment. It was not thought necessary to discuss surgery.

It is some time since I made mention of the Overseas Fund. As you may remember, it got increasingly difficult to keep tab on our colleagues when they began to jump all over creation. Then we issued a special edition of the Review and as its receivers acknowledge its receipt we gathered up more names. The Christmas parcels went off in good time and already we are getting letters of thanks. Here are a few that have just been received:

Secretary,
Winnipeg Medical Society,
Winnipeg.

Many thanks for the very nice Xmas box which arrived in splendid condition. It was very much appreciated.

About nine per cent of the unit enlisted in M.D. No. 10 and I am very proud of them.

It is a big help to know that one is still remembered at home.

With best wishes for the coming year, I am,

Sincerely,

Lynn Gunn, Colonel.

No. 20 Cdn. General Hospital,
Canadian Army Overseas.

The Secretary,

Many thanks for the very fine box which arrived in good shape Nov. 18, 1944. It is much appreciated, you may be sure.

I have been back in England a month now, and after France and Belgium it looks pretty fine.

Have seen very few Winnipeggers since my return: Art Hay, Pitt Perrin, Ed Holland. Art was with this unit but has been moved to 22.

Business is brisk and the surgeons don't want for cases.

We are all looking forward to the day when it will be over and we can get back into civilian clothes again.

Again, many thanks for the box.

Sincerely,

Ross H. Cooper, Colonel.

18 Cdn. General Hospital.

Canadian Army (Overseas).

The President,

Dear Sir:

I wish to thank you and the Winnipeg Medical Society for the parcel which I received about a week ago. It was very acceptable and useful, and came as a distinct surprise and as you know, surprises are always welcome—if they are pleasant ones. It also made me feel that one was not forgotten but was still a member of the Society and one that I am always interested in.

I am enjoying my work over here and there has been lots of it, and besides liking it, am learning as well. We have looked after around 4,000 surgical cases since coming here, all types of wounds—from minor skin ones to complicated compound bones, abdomens and chests. The striking feature as I see it is the early closure of wounds—the closure of compound fractures—even with internal fixations—and very little infection. No doubt the use of penicillin and sulfa drugs has a lot to do with it. We certainly don't see the ill patients with sepsis that are reported from the last war. The use of plaster for wounds—either sutured or open is also an advance. Most of the cases have primary surgery done in Belgium or Holland. We get them in 4-6 days and they are ready for closure of wounds—and the wounds in soft tissue almost all heal. We also do a lot of skin grafting to get wounds closed. We feel that if at all possible, close a wound and then we keep infection out.

I am looking forward to being at a Winnipeg Medical meeting again and some day

would like to tell them about the work of the R.C.A.M.C. here and also to thank them for their kindness.

Yours very sincerely,

Pit Perrin.

♦

No. 21 Canadian General Hospital,
C.O.A., France,

The Secretary,

Dear Doctor:

Very many thanks for the really nice parcel I got from your Society today. Nothing but pure research could have led to the choice of articles in the parcel—just the very things one wants here and can't get and even the tin of ham I received was tempered with beef! It was very nice too—to put the fellows from the other cities on the spot by telling them that in Winnipeg the Medical Society is really an association.

Have been in France now for a considerable time and kept pretty busy. We've followed in the wake of the heavy fighting in northwest France through the rubble of cities. The work is mainly that of passing the seriously wounded down the line of evacuation and treating as many as we can. We've had a fair experience with Penicillin in War Surgery—and although I haven't seen many control cases—judging by the German wounded that we get (who haven't had P—) it constitutes a real advance, although the comparison may not be entirely fair because the Germany Surgery I've seen has not only been without P—but has also been definitely sub-standard surgery. They apparently make no attempt at secondary suture—no attempt to close their compound fractures, and by the time their people arrive here they're dripping pus—if lucky. The less lucky ones have multiple septic abscesses, which apparently German surgeons don't attempt to open. The patients are toxic and a number of amputations have to be done for this reason, while in contrast I've seen only one case of a Canadian wounded that required an amputation to remove gross sepsis.

Joe Downey, Tubber Kobrinsky, Sparling East and Jim Ireland and myself are here acting as buffers between the East and West and I think holding our own at the same time. Dr. Waugh's son worked with me for a while while we were in England. Charlotte Counsell is with us—doing a very good job in the lab.

Please remember us to the members of the Society and the very best of Holiday Greetings.

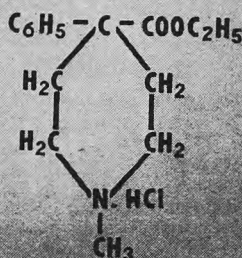
Yours, Allan Klass.

NEW ANALGESIC · SPASMOLYTIC · SEDATIVE

*For
Oral and
Intramuscular
Administration*

Welcome news to a large number of physicians:
Demerol hydrochloride is now available

ethyl 1-methyl-4-phenyl-
piperidine-4-carboxyl-
ate hydrochloride



THE analgesic effect appears to be between that of morphine and codeine, and it persists for from three to six hours.

Demerol has many indications in medicine, surgery and obstetrics.

Demerol has many indications in medicine, surgery and obstetrics.

Before prescribing, physicians should read carefully the booklet on Demerol hydrochloride (sent free on request). Prescriptions are subject to Canadian narcotic regulations.

Supplied for oral use, tablets of 50 mg.; for injection, ampuls of 2 cc. (100 mg.).

Demerol

Trademark Reg. U. S. Pat. Off. & Canada

HYDROCHLORIDE

Brand of MEPERIDINE HYDROCHLORIDE



WINTHROP CHEMICAL COMPANY, INC.

Pharmaceuticals of merit for the physician

General Offices: WINDSOR, ONT.

Quebec Professional Service Office: Dominion Square Building, Montreal, Que.

FOR SIMPLE INSOMNIA

A Barbiturate
of Moderately Long
Duration of Action...



IPRAL CALCIUM

THE SELECTION of a barbiturate capable of producing a long, restful, unbroken sleep is important. Not all barbiturates are equally suited for the purpose. Some act rapidly but their effects are relatively transient. The various types of barbiturates have definite spheres of usefulness.

In conditions such as simple insomnia, restlessness and hysteria, where a sedative is capable of producing a restful unbroken sleep, a barbiturate having a moderately long sedative effect is often preferable.

Ipral Calcium is considered as belonging to the class of barbiturates which possess a moderately long duration of action. Administered orally, approximately an hour before sleep is desired, one or two 2-grain tablets are usually sufficient to induce a 6 to 8-hour sleep from which the patient awakens generally calm and refreshed.

Ipral Calcium is a plain white tablet. There are no markings of any kind by which it might be recognized by the patient.

Ipral Calcium (calcium ethylisopropyl-barbiturate Squibb) is widely used. It is quite readily absorbed, rapidly eliminated and free from cumulative effects when dosage is properly regulated.

Supplied in $\frac{3}{4}$ -grain and 2-grain tablets in bottles of 100; the 2-grain tablets are also available in bottles of 1000.

For literature write
36 Caledonia Road, Toronto

**E·R·SQUIBB & SONS
OF CANADA, Ltd.**

*Manufacturing Chemists to the Medical Profession
Since 1858*

Editorial

You will notice that this issue of the Review is a little smaller and a little fatter. For my own part, I would like to see it reduced in size and increased in thickness to the dimensions of the pocket size so popular in the various "Digests." However, Mr. Whitley has many excellent reasons for not doing so. The government agency that controls the paper has doubled our allowance. This means that we can do one of three things. We can double the size of each issue, or we can double our circulation, or we can make the Review half as large again and sell to 50% more subscribers. I think the third plan is the best and with co-operation on your part, in the matter of contributions, we could introduce to many new Western friends a very commendable publication.

And, without being vainglorious, I think we can claim that it is a commendable publication. A study of the index of last year's volume shows that we had articles from 38 contributors. Many of these were abstracted in other publications. We had requests for permission to publish some of them elsewhere. In addition, in the form of summaries of the Luncheon programmes, we presented useful and usable information on no fewer than 66 conditions, both common and rare. Furthermore, I think our readers will agree that our pages supply them with a maximum of information in a minimum of space and without any soporific tendencies. The Review is definitely not in the hypnotic class of literature.

* * *

In a recent contribution (Trends in Medical Practice) Dr. Thorlakson made this suggestion:

Arrangement could probably be made to send our final year students out into rural communities to be apprenticed for a time to practising physicians. The students would benefit by practical experience under this arrangement. The practising physician would not only come in contact with young, inquiring minds, which is in itself stimulating to all teachers, but would have the necessary relief to give him an opportunity to visit medical centres for courses of study.

Dr. F. G. Allison has submitted the following proposal:

Elaboration of Dr. Thorlakson's suggestion in Manitoba Medical Review (September, 1944) re recent graduate locums for doctors wishing a post-graduate course.

When graduates cease to enter the army immediately on completion of internship it is suggested that all internes who will be leaving hospital on June 1st be circularized about May 1st by the Manitoba Medical Association and asked to send applications to the Manitoba Medical Office for a June locum tenens. Country doctors could be circularized simultaneously.

Doctors wishing a locum for June and a post-graduate course in the last two weeks of June could send a cheque for \$115.00 to cover purchase of a Manitoba license for the graduate and a year's subscription to Canadian Medical Association and Manitoba Medical Association. The doctor would also be responsible for travelling expenses, room and board for the locum, who would receive no cash salary for the month. The graduate would spend the first two weeks of June working with the doctor, and the last two weeks working alone. If the doctor wished to take a holiday afterwards he could engage the locum at the usual rates.

It would be interesting to learn what the out-of-town doctors think of this.

* * *

You will find in this issue the paper by Dr. Donald McEachern on Epilepsy. This was given at the October meeting of the Winnipeg Medical Society and was greatly enjoyed. The mystery of Epilepsy is still far from solved, but the stigma, which almost as much as the disorder itself had handicapped its victims, is being removed. It is well to realize that while many epileptics are subnormal mentally, many others have had genius. In fact, genius is to madness near allied, and not infrequently epilepsy is the link. Thus Peter the Great, his half-witted half brother Feodor, and Ivan the Terrible were all epileptic. So also were Julius Caesar and his degenerate successors, Caligula, Germanicus and Nero; Charles V, Marlborough and Napoleon; Mahomet, Paul and Swedenborg; Dante, Balzac and Dumas; Byron and Sheridan; Handel and Mozart; all took fits great or little, many or few. On the whole the "good" epileptics outnumber the "bad", and the world is richer for the abnormal stimulation of the falling sickness.

* * *

Dr. Gowron's case history will be read with interest and proves the value of combining penicillin with the sulphas. This case, however, presents another aspect with intriguing possibilities. One wonders what will the

child be like that has been so tormented in its uterine life, whose "pre-birth harmony" has been so rudely disturbed. Twice was it vigorously and violently assailed from below. Through its veins coursed toxins and bacteria, which, under ordinary circumstances, "hold such an enmity with blood of man" that they "with sudden vigor do curd and posset, like eager droppings into milk, the thin and wholesome blood." Well, they didn't, and the little pre-natal brain pondering the matter is probably hatching a lot of superiority complexes for use later on. What will he be later on, this child who sets at naught the machinations of "wise women" and the virulent essence of powerful microbes? Perhaps those hands now modestly folded upon the yet unseeing eyes are fated to hold the rod of empire. Perhaps here in utero is Superman in person. Perhaps we have, in embryo, a future prime minister, equipped this time with both wishbone and backbone. Perhaps the promise is still greater, not just a Superman, not a mere Super-King, but staggering thought, the future Grand Panjandrum of chiropractic, who thus, in the best tradition, shows even before his birth the awesome and tremendous potentialities that go with the perfect spine.

* * *

Letter of Thanks

I am taking this means of reaching you all quickly. I am writing this on Christmas Day. A short time ago I opened the package Pat McNulty and Max Rady brought to me from you a few days past. Your present filled me with feelings that I cannot express. Rich as is the gift, richer still is the kind thoughtfulness that inspired it. I would like to think that I had in some way deserved it but I do not see how I have. The debt is all mine. During the past months so many of you have so often gone out of your way and sacrificed your needed leisure to visit me. I have had so many tangible evidences of your interest that it makes me feel very humble to receive so much when I have given so little. Not only my colleagues but internes and students also have placed me so deeply in their debt that I cannot hope to repay them though I shall strive to do so. I want to avoid sentiment but that is difficult especially at this season and I cannot help saying that the heart of medical Winnipeg is very large and that mine is very full.

J. C. Hossack.

Manitoba Medical Service

With the co-operation of the Editor of the Manitoba Medical Review, the M. M. S. will give information on the progress of the plan, and will endeavour to explain and smooth difficulties which are bound to arise in the early stages.

Your patients will ask you for a receipt for services rendered, this at a time when you have received nothing, and will in all likelihood only be paid for a portion of your account. As this would lead to difficulties involving you with the Income Tax authorities, the matter was taken up with them; they understand the situation, and a copy of the letter received here follows:

"Re: Income Tax — Medical Expenses.

Pursuant to recent conversation with Dr. E. S. Moorhead respecting income tax requirements in relation to a situation temporarily affecting your organization whereby final payments to medical practitioners in respect of services rendered are deferred, I wish to advise that acknowledgment indicating the total amount of the liability, date admitted by your organization and the name and address of the practitioner concerned, will **for the time being** be considered as the equivalent of a receipt when produced by any taxpayer in support of claim for medical expense allowance."

The report forms now used are about the fourth to be tried since 1934; they are designed to require the minimum of writing and time, and yet provide the large amount of information which must be transferred to a Hollerith card. Some doctors or their nurses appear to find no difficulty and send in reports which require no alteration; others are careless or irked and the interpretation of such reports may be difficult, and you will have to be telephoned, which is something we try to avoid. If your diagnosis is vague and etiology is ignored, age may help to decide between an infection or a degeneration; as for instance in cardiac cases, age is frequently overlooked.

"Continued to or from" is most important. Supposing you had a case of diabetes which you were seeing once or twice monthly for a year and failed to record that it was a continued case, the sorting machine, which is not a thinking machine, would report twelve cases of diabetes. If you mark it "continued to" and the patient never turns up, no harm is done for no card is punched for the following month.

The diagnosis you record is coded into numbers which signify certain diseases listed in the International List of Causes of Death and Disease. I am giving you some of the diagnoses which have been submitted by doctors in the F.F.M.S. or M.M.S. "Pain in abdomen." "Limp of left leg." "Lump in the breast." "Stiffness in neck—headache." "Deafness." "Pelvic pain." "Heart." "Ill-defined pains." "Nasal Secretion." "Treatment of Nose." These are not diagnoses unless you can say that a patient is capable of making a diagnosis and over the telephone at that. I can assure you that none of these can be fitted into the International List. They are mostly a single sign or symptom but certainly not what you would tell your patient as being his or her disease, because they knew it before they ever came to you.

Ringling a number is much more accurate than a tick. You may be sure of one thing, every item in every subsection of the report form has been put there for one reason, to get as much information and give you as little work as possible. If your nurse or secretary does most of the clerical work, please give her this article to read and explain whatever she does not understand, or refer her to me.

The Board of Trustees intends extending the privilege of membership to all licensed practitioners in Manitoba who wish to apply and will enter into the usual contract. The principal reason is as follows—the homes of many workers in Greater Winnipeg are in rural Manitoba. In cases of illness or elective surgery these workers may prefer to go home and be treated by their family doctor. Under the terms of the contract the M.M.S. would not be liable for the fees unless the doctor were a Medical Member of the Association; this would be an injustice to the member and doctor. It is to be fully understood that this does not imply any intention of enrolling in rural Manitoba now; the Board will not do so until administration and many other difficult problems have been solved, and this can only be done in a contained area.

At this date, there is no complete scale of fees for the different specialist groups and the Board has been waiting for action on the part of both the groups and the executive committee of the M.M.A. It is for that reason and not for lack of funds that no payments have been made on doctors' accounts. The auditors will be examining our books early in the New Year. If there is a large

outstanding liability consisting of amounts owing to doctors which cannot be estimated till a scale is in force, there may be further delays.

By a motion of the Board it was ruled that the membership of the Medical Advisory Committee shall be made up as follows: two members of the Board, and one from any licensed practitioner in Greater Winnipeg who is a member of the M.M.A. If you are interested in the development of the Service, and desirous of assisting in its operation, you are invited to send your name to the Medical Director at 400 Royal Bank Building, Winnipeg; your services will be asked for as and when they are needed.

Many doctors consider that Haemoglobin estimation should properly be included in the complete physical examination, for which a fee of \$5.00 is paid. Others charge \$1.00 extra. The matter, I understand, is under consideration by the fee committee of the M.M.A.; until a ruling is given each doctor will have to decide for himself what action is proper.

As at December 18th the number of participants was over 6,500—an indication of the desire for such a service; 80% of these have chosen Plan B, the complete service.

E. S. Moorhead, Medical Director.



Medical Events for January

Hospital Luncheons

Thur., 4th, 12:30, Winnipeg General Hospital.
Tues., 9th, 12:30, Grace Hospital.
Thur., 11th, 12:30, St. Boniface Hospital.
Tues., 9th, 12:30, Misericordia Hospital.
Thur., 18th, 12:30, Winnipeg General Hospital.
Thur., 25th, 12:30, St. Boniface Hospital.
Friday, 26th, Victoria Hospital.
Tues., 23rd, 12:30, St. Joseph's Hospital.

Tumour Clinics

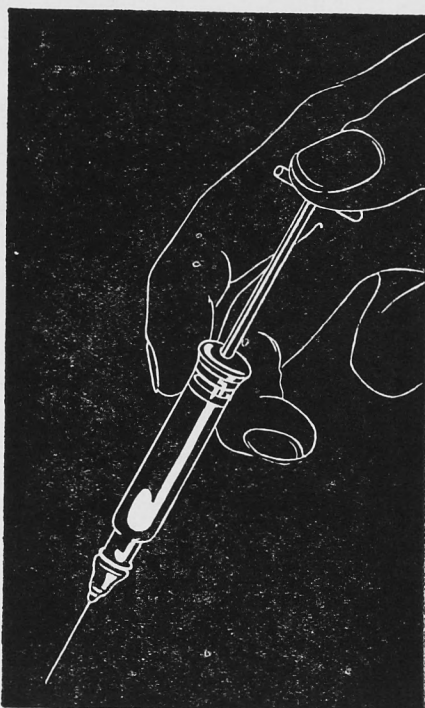
Winnipeg General Hospital, every Wednesday at 9:00 a.m.
St. Boniface Hospital, every Friday at 10 a.m.

Winnipeg Medical Society

Friday, 19th, 8:15 p.m., Medical College.

Medical History Section

Friday, 26th, 8 p.m., Medical Arts Club Rooms.



"T.O.A."

(TOTAL OPIUM ALKALOIDS)

AMPOULE No. 540 "FROSST"

FOR REDUCED NARCOTIC BY-EFFECTS

MODES OF ISSUE:

1 cc: Ampoules — boxes of
6 and 100

DOSAGE:

The contents of 1 cc. ampoule.

(Each 1 cc. ampoule contains the alkaloids of 0.1 G (1 2/3 gr.) Opium, B.P. including anhydrous Morphine 0.01 G. (1/6 gr.)

Many patients have an idiosyncrasy towards Morphine and sometimes undesirable effects are produced.

Certain alkaloids of Opium, as contained in T.O.A., help to check these by-effects; some are more stimulating to the central nervous system, specifically to the respiratory centre; others relax smooth muscle, thus relieving the intestinal spasm which not infrequently follows the injection of Morphine alone.

A dose of T.O.A., containing only 1/6 gr. of Morphine, is equivalent in effectiveness to 1/4 gr. of Morphine administered alone — another reason why by-effects are less liable to occur with T.O.A.

Charles E. Frosst & Co.

MONTREAL

CANADA



The Canadian Mark of Quality Pharmaceuticals Since 1899

WHERE QUALITY AND PRICE ARE EQUAL OR BETTER, PRESCRIBE CANADIAN PRODUCTS

Personal Notes and Social News

Captain Donald C. Brereton, R.C.A.M.C., son of Dr. and Mrs. T. C. Brereton, was married at St. Peter's Church, Hale, England, on October 21st, to Second Lieut. Brenda Elizabeth Seton Scorer, a Nursing Sister in the R.C.A.M.C., second daughter of the Rev. N. V. and Mrs. Scorer, of Kensington Gardens, Hale.

Dr. and Mrs. Barrie P. Duncan are happy to announce the birth of a daughter (Barbara Marion) on December 12th, 1944, at the Winnipeg General Hospital.

The sympathy of the Executive and Members of the Manitoba Medical Association is extended to Dr. W. A. McElmoyle of Victoria, B.C., on the loss of his father, who died on December 14th, 1944.

Surgeon-Lieut. Murray McLandress, R.C.N. V.R., and Mrs. McLandress are pleased to announce the birth of a daughter (Mary) at Halifax, N.S., on December 14th, 1944.

Dr. George H. Hamlin of Portage la Prairie, Man., has been appointed coroner in and for the Province of Manitoba.

Dr. and Mrs. Eyjolfur Johnson of Selkirk, Man., are receiving congratulations on the birth of a daughter on December 4th, 1944, at the Winnipeg General Hospital.

Dr. E. S. Moorhead has announced his retirement from active medical practice and in future will assist with the direction of the Manitoba Medical Service.

Dr. and Mrs. D. W. Morrison's only daughter, V. A. D. Nursing Member Agnes Jean Morrison, R.C.A.M.C., was married on December 23rd to Lieut. Frederick Wesley Jones, C.A.C., son of Mr. and Mrs. W. Jones of Victoria, B.C.

Major Glen F. Hamilton, R.C.A.M.C., has returned from active service overseas and re-entered civilian practice at 185 Kelvin Street.

Dr. and Mrs. J. T. Sterling's daughter, Florence Elizabeth, was married in St. Andrew's United Church, River Heights, December 9th, to John Pierce-Jones, son of Rev. and Mrs. David Pierce-Jones, of Solvang, California.

A Companion Product to Nivea Creme

Superfatted NIVEA BASIS SOAP

Nivea Basis Soap is made from the freshest edible tallow. In the saponification process, alkalization is carried out with precise, conscientious care, so that the presence of irritant free-alkali in the finished soap is excluded. To prevent the skin from being deprived of too much of its natural lubrication, Nivea Basis Soap is superfatted with Eucerin Anhydrous. Patients sensitive to ordinary toilet soaps, or with fat-deficient skin, can use Nivea Basis Soap indefinitely. Available, priced at 25c per cake, 3 for 69c.



Made in Canada for
Herts Pharmaceuticals
Limited
Welwyn Garden City,
Herts, England

"THE MEDITERRANEAN"

A study by Aristide Maillol;
reproduced from the Hyperion Press
art book "Maillol".



At the Menopause...

Two highly effective, clinically proved products for oral
oestrogenic therapy... "Premarin" (tablets) to control even
the most severe symptoms; "Emmenin" (tablets and
liquid) for milder symptoms and maintenance.

"PREMARIN" and "EMMENIN"

conjugated oestrogens
(equine)

conjugated oestrogens
(placental)

NATURALLY OCCURRING • WATER SOLUBLE • WELL TOLERATED
ESSENTIALLY SAFE • IMPART A FEELING OF WELL-BEING



300

Department of Health and Public Welfare

Comparisons Communicable Diseases — Manitoba (Whites Only)

DISEASES	1944		1943		TOTALS	
	Nov. 5 to Dec. 2	Oct. 8 to Nov. 4	Nov. 7 to Dec. 4	Oct. 10 to Nov. 6	Jan. 1 to Dec. 2, '44	Jan. 1 to Dec. 4, '43
Anterior Poliomyelitis	5	7	3	2	92	38
Chickenpox	223	162	330	197	2031	1706
Diphtheria	30	14	33	12	192	253
Diphtheria Carriers	4	2	20	3	31	43
Dysentery—Amoebic	—	—	—	—	—	7
Dysentery—Bacillary	39	1	—	2	102	18
Erysipelas	1	8	9	4	61	68
Encephalitis	—	1	1	1	11	12
Influenza	5	12	81	13	174	490
Measles	82	76	50	79	5300	2763
Measles—German	2	3	—	—	242	171
Meningococcal Meningitis	—	2	3	4	20	35
Mumps	27	9	171	115	1594	3502
Ophthalmia Neonatorum	—	—	—	—	—	—
Pneumonia—Lobar	4	7	15	8	138	167
Puerperal Fever	—	—	—	1	4	3
Scarlet Fever	78	85	159	149	2026	1400
Septic Sore Throat	—	—	2	1	22	42
Smallpox	—	—	—	—	—	—
Tetanus	—	—	—	1	2	2
Trachoma	—	—	—	—	—	3
Tuberculosis	26	41	25	53	534	538
Typhoid Fever	2	—	—	1	17	22
Typhoid Paratyphoid	—	—	—	—	—	3
Typhoid Carriers	—	—	—	—	1	2
Undulant Fever	—	1	1	1	6	11
Whooping Cough	24	49	80	84	384	1795
Gonorrhoea	161	152	137	126	1629	1563
Syphilis	56	54	67	60	620	535
Actinomycosis	—	—	1	—	2	2
Meningitis Carriers	—	—	—	—	—	6

Deaths from Communicable Diseases

October, 1944

DISEASE	*738,000 Manitoba	*3,825,000 Ontario	*906,000 Saskatchewan	*2,972,300 Minnesota	*641,935 North Dakota
Actinomycosis	—	1	—	—	—
Anterior Poliomyelitis	5	13	1	28	1
Chickenpox	223	1243	200	109	109
Diphtheria	30	38	17	43	42
Diphtheria Carriers	4	—	1	—	—
Dysentery—Amoebic	—	—	—	11	—
Dysentery—Bacillary	39	—	—	8	—
Erysipelas	1	5	2	—	—
German Measles	2	30	—	2	—
Influenza	5	112	—	1	23
Leth. Encep.	—	—	—	—	1
Malaria	—	5	—	3	—
Measles	82	420	37	95	5
Meningococcal Meningitis	—	2	1	9	1
Mumps	27	307	73	4	—
Ophthalmia Neonatorum	—	—	—	—	—
Puerperal Fever	—	—	—	—	—
Scarlet Fever	78	611	47	231	59
Septic Sore Throat	—	8	3	—	4
Smallpox	—	—	—	—	—
Trachoma	—	—	—	—	4
Tuberculosis	26	179	25	13	27
Tularaemia	—	1	—	—	—
Typhoid Fever	2	1	1	1	—
Typhoid Fever Carriers	—	—	—	—	—
Typhoid—Para-Typhoid	—	1	—	—	—
Undulant Fever	—	11	—	9	—
Whooping Cough	24	213	12	150	40
Gonorrhoea	161	621	—	—	24
Syphilis	56	391	—	—	7

*Approximate Populations.

Urban—Cancer 43, Pneumonia (other forms) 10, Tuberculosis 8, Poliomyelitis 2, Syphilis 2, Pneumonia Lobar 1, Disease of Pharynx and tonsils 1, Cerebrospinal meningitis 1. Other deaths under one year 17. Other deaths over one year 203. Stillbirths 9. Total 297.

Rural—Cancer 33, Tuberculosis 14, Pneumonia (other forms) 8, Pneumonia Lobar 2, Diphtheria 1, Measles 1, Syphilis 1, Dysentery 1. Other deaths under one year 13. Other deaths over one year 106. Stillbirths 12. Total 192.

Indians—Measles 7, Tuberculosis 4, Pneumonia (other forms) 1, Whooping Cough 1. Other deaths under one year 5. Other deaths over one year 2. Stillbirths 2. Total 22.

Diphtheria—Thirty cases in Manitoba in four weeks! It can be wiped out if every child receives three doses of toxoid before the age of one year and an augmenting dose every four years thereafter.

Measles and Scarlet Fever have been quite prevalent this year.

Typhoid Fever—The two cases are reported from Selkirk. Since December 2nd two cases in one family have been reported from Amaranth. In any rural case of prolonged fever, typhoid should be suspected.

Undulant Fever—No doubt many mild cases of disease are not seen and never diagnosed. Pasteurization of milk would prevent the major portion of this infection.



Future Horizons...

With our objective the making of a better world for women through the development of gynestic pharmaceuticals based on medical research — we pause at this time to express our thanks to the members of the Canadian medical profession who have helped us to attain the first steps in our goal.

ORTHO

PRODUCTS OF CANADA LIMITED, TORONTO

Penicillin Therapy in Gonorrhea and Syphilis

Delivered at the Third Western Canada Venereal Disease Control Conference, Regina, Saskatchewan, November 21st, 1944, by Dr. K. J. Backman

Penicillin is the first therapeutic agent in the history of medicine that is effective in the treatment of both gonorrhoea and syphilis.

Dr. Florey states penicillin is bacteriostatic and not bacteriocidal, at least in concentrations likely to be used therapeutically, and reliance must therefore, be placed on the body defences, both humoral and cellular, to destroy the bacteria present in a lesion, while penicillin prevents their multiplication.

The most practical method of administration in the treatment of venereal disease is the intramuscular injection of a solution of the sodium salt, containing 5,000 to 10,000 units per cubic centimeter. Doses of 20,000 units are injected every three hours until the required total dosage has been given.

Because of limited supplies, minimum adequate, rather than maximum effective doses are sought. With more liberal supplies there is likely to be a trend to higher dosage.

The gonococcus heads the list of pathogenic bacteria given in the order of their sensitivity to penicillin in culture. It is already well known that penicillin will cure gonorrhoea with a rapidity and certainty unapproached by any other form of treatment.

Penicillin was until recently, reserved for sulphonamide resistant gonorrhoea. Now the American Armed Services are being treated initially with penicillin, and sulphonamides are reserved for penicillin failures. 100,000 units is considered the minimum adequate dosage.

Inadequate dosage may tend to produce penicillin fastness. This is to be expected if one may reason by analogy with the behaviour of other organisms. So far this expectation has failed to materialize.

Reinvestigation of patients reported as penicillin failures has revealed that they were often labelled so on the basis of inadequate penicillin therapy or persistence of mucoid discharge of non-gonococcal origin. However, there have been some failures with as much as one million units.

The production of penicillin resistant gonococci by repeated transfer of cultures on gradually increasing concentrations of penicillin has been unsuccessful.

In the treatment of gonorrhoea, the drug acts by way of the blood stream rather than by way of the urine. This has been shown by withholding fluids the day prior to, and the day of treatment, so that the patients did not void during the experiment. The urethral discharge ceased as dramatically as ever.

Local instillations of penicillin into the urethra, over a 24-hour period, in the strength of 250 to 500 units per c.c. have been tried. The drug was retained by means of a clamp, and reinjections were made after each voiding. Discharge ceased and urine became clear. Within 3 to 4 days the discharge invariably reappeared.

The majority of relapses occur in the first post-treatment week with progressively less in the second, and third week.

Complications of gonorrhoea respond well to penicillin, although the more serious forms require prolonged treatment with higher dosage.

The action of penicillin is not interfered with by substances that inhibit sulphonamides, e.g., certain bacteria, bacterial extracts, pus fluids, tissue autolysates, peptones, etc.

In gonorrhoeal ophthalmia, parenteral treatment should be supplemented by local instillations of penicillin, 250 to 1,000 units per c.c. The practice is to instill 2 or 3 drops of solution every hour or so, in grave cases, every half hour, until clinical improvement is evident. The penetration into the anterior structures of the eye, including the iris, is very good. We have obtained dramatic results, by administering sulfadiazine orally, and penicillin locally, in a few cases of ophthalmia neonatorum.

The "Routine massage" of gonorrhoea infected prostates treated with penicillin is unnecessary and may be harmful. Gonorrhoea complicated with severe urethral stricture responds poorly. Gradual dilatation, along with repeated courses of penicillin is necessary.

In gonorrhoeal arthritis the dosage should probably be 200,000 units or more, as absorption into the joint cavity is poor.

Localized collections of pus should be drained in conjunction with penicillin therapy.

It appears that results in women are comparable to those for men. Extensive pelvic inflammatory disease responds particularly well. The tendency is to give 200,000 units to women.

Although encouraging results have been obtained with penicillin in the treatment of syphilis, present supplies do not warrant its use for this purpose. Distribution has not been approved, except to several research centres in the United States.

In persons with both primary syphilis and gonorrhoea, syphilis may be temporarily masked, and escape early diagnosis.

As syphilis is characterized by chronicity, long periods of latency and a tendency to relapse, a reliable evaluation of penicillin therapy must await the passage of years. Certain deductions can, however, be made from reports of several hundreds of cases treated at variable periods for the past year or more.

The original selected total dosage of 1,200,000 units in an eight-day period, administered intramuscularly, every three hours, night and day, is the minimum effective dosage. This may prove to have been ineffective after further observation. The tendency is to give larger dosage up to 2,400,000 units. The optimum time-dose relationship, is not yet established.

Subtherapeutic penicillin dosage (total 300,000 to 600,000 units) plus subtherapeutic daily mapharsen dosage (total 320 m.g.) administered in eight days, produced more favorable results than high penicillin dosage alone. It would appear that patients resistant to penicillin are not resistant to the arsenicals and vice versa. A combination of the two forms of treatment may eventually prove to be more effective than either alone.

The dosage recommended for infants is, 16,000 to 19,000 units per pound body weight given over a period of eight days.

The immediate effect of penicillin is superior to any former therapy in terms of:

- (1) disappearance of any surface organisms from open lesions.
- (2) healing of lesions in early and late syphilis.

(3) a trend toward serologic reversal.

The trend towards relapse in early syphilis is in direct relationship to total penicillin dosage given. The relapse rate is lowest when penicillin and mapharsen are administered concurrently. It appears that the relapse rate in penicillin treated early syphilis compares favorably with treatment by the best standard methods of today. This must be verified or otherwise with lapse of time.

Penicillin apparently protects the child in utero but several years of postnatal observation are still necessary. A much larger case material must be observed before proper evaluation of effectiveness of treatment can be made. The same holds true as regards curability of infantile prenatal syphilis. Results in Interstitial Keratitis have been inferior to former methods.

Penicillin has a favorable effect in paresis, tabes and lightning pains. The results are especially good in acute syphilitic meningitis and early asymptomatic neurosyphilis.

Herxheimer reactions, after the penicillin treatment of early syphilis are frequent but not serious, except in the too rapid treatment in the first day or two in infants with virulent infections. This necessitates decreased dosage the first 24 to 48 hours. In late syphilis, Herxheimer reactions and the therapeutic paradox occur and must always be kept in mind. In pregnancy, abdominal cramps with threatened abortion have been reported. This is probably due to a grossly diseased placental area, and can be avoided by reduction of dosage at the beginning of treatment.

Other reactions due to penicillin itself, are negligible.

The question arises, how will Penicillin therapy affect venereal disease control in the next few years?

I shall conclude my remarks with an answer and a warning in the words of Dr. John Stokes:

"If penicillin makes good its promise, (and there are substantial 'if's' yet to be evaluated), the cheapening, the safety, the facilitation in disease control, can directly expand, instead of shrinking, the volume of disease to be dealt with. The worker who lies back upon his oars at this juncture, believing the finished line crossed and the goal attained, may be venereal disease control's worst enemy by default."

LIVER EXTRACT INJECTABLE

Liver Extract Injectable is prepared specifically for the treatment of pernicious anaemia. The potency of this product is expressed in units determined by actual responses secured in the treatment of human cases of pernicious anaemia. Liver Extract Injectable as prepared in the Connaught Laboratories has the following advantages:—

1. Proven potency — *Every lot is tested on cases of pernicious anaemia.*
2. High concentration of potency — *Small dosage and less frequent administration.*
3. Low total solids—*Discomfort and local reactions occur very infrequently because of the high purity of the product.*

New Package and Reduction in Price

Commencing January 1, 1945, the present 4-cc. and 12-cc. vials of Liver Extract Injectable will be discontinued, and the product will be supplied in packages containing *single* 5-cc. vials and in multiple-dose packages containing *five* 5-cc. vials. The larger package is for the convenience of hospitals and clinics. It is also available to physicians. The increase in volume per vial permits a reduction in price per cc. and means a saving per dose to the patient.

CONNAUGHT LABORATORIES

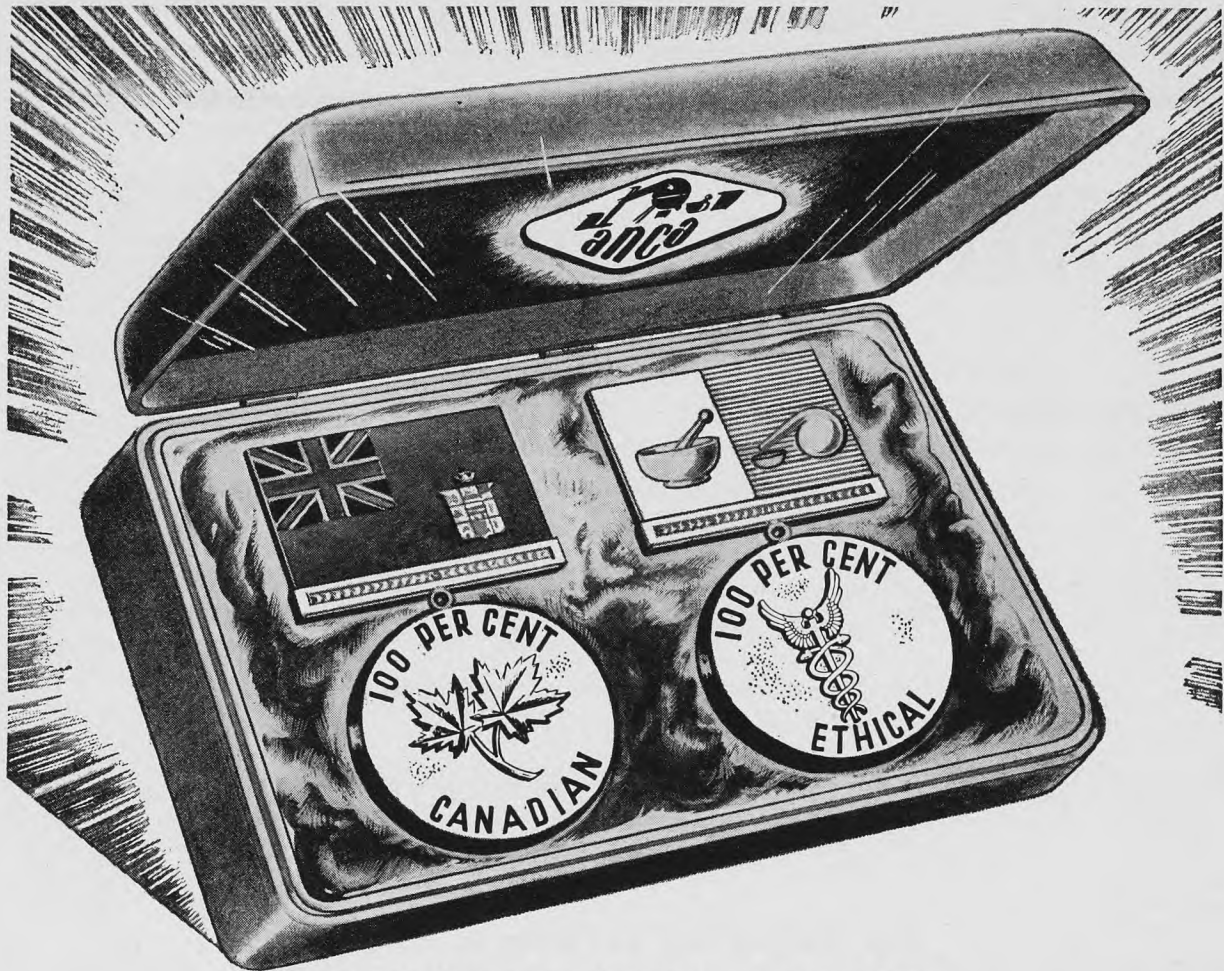
University of Toronto

Toronto 5, Canada

Depot for Manitoba

BRATHWAITES LIMITED

431 Portage Avenue, Winnipeg



THANKS TO YOU, DOCTOR

1944 IS NOW HISTORY. May we voice our appreciation? The splendid support you have afforded our products, not only during the year past, but within the past decade, is most gratifying.

In this day of awards we wish it were possible to bestow upon you, individually, such a decoration as appears above.

You have proved conclusively that an entirely Canadian pharmaceutical house can warrant your valued support. You have made the Anglo-Canadian Drug Company possible. The steadily increasing number of your prescriptions for such products as **Scabanca, Broncho-Rectal Suppositories, Prolonotic**

Tablets, Iroplex Syrup, Varbital and latterly **Osteocaps**, just to mention a few, evidences constant and satisfactory therapeutic results.

Your faith in our products has obviated the necessity of our promoting an "over-the-counter" demand for a single item amongst our more than 500 preparations. They are reserved for the use of the profession exclusively—awaiting your command.

THANKS AGAIN, DOCTOR, and may the coming year be one of health, prosperity and happiness for you and yours and may we continue to serve you for many years to come.

*Anglo-***CANADIAN**
DRUG  *Company*

LIMITED

OSHAWA

CANADA

MANUFACTURERS OF FINE PHARMACEUTICALS

Western Depot—236 Edmonton St., Winnipeg

CORTUNON

A Cardiac Hormone, Stimulant, Non Toxic,
Non Pyrogenic, Non Cumulative.

FELSOL

The British remedy for
Asthma and Bronchitis.

HYPOTENSYL

Medication of Choice for Treatment
of Duration Against Hypertension.

PANTAVENE

Total Extract of Oats the Natural Tonic
for "ASTHENIAS."

STANNOXYL

"THE ORIGINAL" Tin and Tin-oxide
Preparation.

SULFOSALYL

The Balanced, Synergistic Combination for
Relief of Rheumatics and Arthritis.

Vi-Mi-Caps

The Most Complete Formula Combining
Scientifically the Recognized VITAMINS
PLUS THE ESSENTIAL MINERALS.

DOCTORS' and NURSES' DIRECTORY

213 Balmoral Street, Winnipeg, Man.

24-Hour Service

Phones: Victorian Order of
 Doctors' — **72 152** Nurses—night calls,
 Nurses' — **72 151** Sundays and
 Registered Nurses. holidays.
 Practical Nurses. Phone **72 008**

Physiotherapists and Masseuses

—P. BROWNELL, Reg. N., Registrar.

Medical Business Bureau

Investigations on character and financial worth; Personal contact with doctors; Follow-ups; Complete legal facilities; Bonded agents throughout Canada; Regular monthly returns.

211 Power Building

Phone 23 534

Winnipeg

Buy an Income for Life

Security at Low Cost

Dominion Government Annuities are the soundest investment you can make. The income is greater than can obtain from any other investment offering the same security. Your money accumulates at 4% compound interest. Your investment is backed by all the resources of Canada... Every dollar you invest goes into your own annuity. The Government absorbs all cost of administration.

For particulars write:

Mrs. E. L. Taylor, Representative

CANADIAN GOVERNMENT ANNUITIES

617 Royal Bank Building., Winnipeg, Man.

DREWRY'S DRY GINGER ALE

Doctors recommend it!

Hospitals advise it!

Patients ask for it!

—
3 Sizes

6-oz., 12-oz., 28-oz.

The Drewrys Limited
 Phone 57 221

PHYSIOTHERAPY

by J. C. Swann

Member of

THE CANADIAN PHYSIOTHERAPY ASSOCIATION

(Incorporated by Dominion Charter)

Graduate of: Massage, Swedish Movements, Muscle Re-education and Medical Gymnast, 2 years training in Christie Street Hospital, Toronto, Masseur at Deer Lodge Hospital, Pensions and Health, Winnipeg, for the past 15 years.

(Under Medical Supervision or Direction)

Phone 80 760
after 1 p.m.438 Somerset Bldg.
Winnipeg, Man.Res. Phone
54 195**The Winnipeg Drug Co., Limited**

PRESCRIPTION SPECIALISTS

Agents for

NICHOLSON'S VACCINES

381 PORTAGE AVE (Cor. Edmonton)

Phone 24 866

POULENC FRERES

204 YOVILLE SQUARE — MONTREAL

The home of:

CORYPHEDRINE

STOVAGINAL

DAGENAN

SONERYL

Detailed literature upon request

**ROSCOE & HICKSON**

352 Cumberland Ave., WINNIPEG

Printers of

The Manitoba Medical Review

We Specialize in Professional Stationery

RAMSAY

Guild Optician

A friendly optical service backed by a wealth of experience and skill, and equipped with the most modern of scientific instruments.

Our ability to meet the high standards as required by the Eye Physician has been fully demonstrated over a period of many years.

•
ROBERT S. RAMSAY

Phone 23 033

Medical Arts Building
WINNIPEG

Manitoba Depot

for

Connaught Laboratories

Biological Products
Insulin and Liver Extract

+

Phone, wire or write for immediate service on
all prescription requirements.

+

BRATHWAITES LIMITED

Phone 21 085

Portage Avenue

Winnipeg, Man.

Regular Stockists

Surgical Department

*Equipped with
Special Fitting Room*

•
For Trusses, Abdominal Supports and Elastic Stockings. We gladly extend the use of this Fitting Room to the Medical Profession.

Prescription Department

We Employ Only Graduate Pharmacists. Highest Quality Drugs and Chemicals Used. Every Prescription Double Checked.

•
Doctor's Phone 21263

Direct Line

Drug Section, Main Floor Donald

THE T. EATON CO. LIMITED

BACKGROUND

1 LB. NET

MEAD'S DEXTRI-MALTOSE

A product consisting of maltose and dextrans, resulting from the enzymic action of barley malt on cereal starch.

WITH SODIUM CHLORIDE 2%

No. 1

SPECIALY PREPARED FOR USE IN INFANT DIETS

MEAD JOHNSON & CO.
OF CANADA, LTD.
BELLEVILLE, ONT.

KEEP THIS PACKAGE TIGHTLY CLOSED AS A PROTECTION AGAINST MOISTURE

DO NOT REMOVE CONTENTS WITH A WET SPOON - KEEP DRY

THE use of cow's milk, water and carbohydrate mixtures represents the one system of infant feeding that consistently, for over three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Mead's Dextri-Maltose.